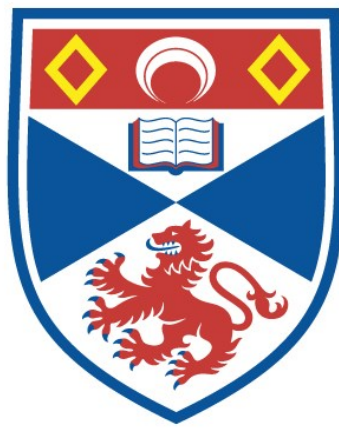


ACTS OF VIOLENCE AGAINST CIVIL AVIATION:
HISTORICAL SURVEY, PERSPECTIVES AND
RESPONSES

Jin-Tai Choi

A Thesis Submitted for the Degree of PhD
at the
University of St Andrews



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SURVEY, PERSPECTIVES AND RESPONSES**

**A Thesis for the Degree of
Doctor of Philosophy**

by

JIN-TAI CHOI

**Department of International Relations
University of St. Andrews**

August 1992



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Abstract

Acts of violence involving civilian aircraft and airline facilities, as well as air travellers have been exploited by terrorist and others since 1931. This form of international terrorism is more than an attack on the rights of the innocent and rule of law. It constitutes a great threat to global peace. Although such attacks represent a small percentage of total terrorist incidents, it is clear that acts of violence directed at civil aviation are not limited by geographical or political boundaries. As escalating threats to civil aviation have caused great concern to the international community without regional exception, governments have introduced security measures against such attacks. The deterrent or diversionary effect of tight security programmes have been reflected in a perceptible shift of terrorist attention to easy targets and other forms of attack. However, governments and the civil aviation industry have failed to keep ahead of changing threats. They upgraded their security capabilities to tackle only the known methods of terrorist attacks. This short-sighted approach is the most serious concern for the safety of civil aviation. It cannot be emphasised too strongly that both the nature and the level of the security threat change frequently and must be monitored constantly in order to foresee possible danger and to consider how to cope with such threats. The international community must not allow the perpetrators of aviation terrorism to get so far ahead of the world's aviation security system. To achieved this aim, aviation authorities must develop long term plans to tackle terrorist activities against civil aviation. This will be a monumental task. However, where there is a will, there is a way.

I, Jin-Tai Choi, hereby certify that this thesis, which is approximately 100,000 words in length, has been written by me, that it is the record of work carried out by me and that it has not been submitted in any previous application for a higher degree.

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I was admitted as a research student under Ordinance No. 12 in April, 1989 and as a candidate for the degree of Doctor of Philosophy in April, 1989; the higher study for which this is a record was carried out in the University of St. Andrews between 1989 and 1992.

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This dissertation is dedicated to my father, **Byung-Woo Choi**, and mother,
Myo-Rae Kim, who have devoted much of their lives to my education.

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At the completion of this study, it is my privilege to express special thanks to those who provided me with unending support and encouragement along the way. First of all, I must express my profound appreciation to Professor Paul Wilkinson for his skilful supervision and continual encouragement during the research and writing of this dissertation. My thanks is also due to Mrs Susan Wilkinson who provided me with a substitute family over the last two Christmas seasons, alleviating my loneliness and homesickness, and giving me a valued insight into Western culture. I am also deeply grateful to the members of staff in the Department of International Relations at the University of St. Andrews for their tolerance and guidance.

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Abbreviations

AD	Accion Democratica(Democratic Action)
AASB	Allied Air Safety Board
ALFE	Arab Liberation Front for Eritrea
ANO	Abu Nidal Organization
ANYO	Arab National Youth Organization
ARTCC	Air Route Traffic Control Centre
ATS	Air Traffic Service
BALPA	British Air Line Pilot' Association
BJO	Black June Organization
BR	Bandera Roja(Red Flag)
BSO	Black September Organization
CAAC	Civil Aviation Administration of China
CCD	Colour Coding Detectors
CPSU	Communist Party of the Soviet Union
CREB	Comando Ramon Emeterio(Ramon Emeterio Betance Command)
ELN	Ejercito de Liberacion Nacional(National Liberation Army)
ETA	Estimated Time of Arrival
ETD	Estimated Time of Departure
FAA	Federal Aviation Administration
FALC	Fuerzas Armadas Revolucionarias de Colombia(Revolutionary Armed Forces of Colombia)
FALN	Fuerzas Armadas de Liberacion Nacional(Armed Forces of National Liberation)
FIRs	Flight Information Regions
HF	High Frequency
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ICRC	International Committee of the Red Cross
IFALPA	International Federation of Airline Pilots' Association
INS	Inertial Navigation Systems
IRA	Irish Republican Army
IRG	Iranian Revolutionary Guard
ISDCA	International Security and Development Cooperation Act
IZL	Irgun Zvai Leumi
JAL	Japan Air Lines
JRA	Japanese Red Army
KAL	Korean Airlines
KCAB	Korean Civil Aviation Bureau
LACAC	Latin American Civil Aviation Commission

OTR	Oceanic Transit Route
PAL	Philippine Airlines
PFLP	Popular Front for the Liberation of Palestine
PLO	Palestine Liberation Organization
PFLP-GC	Popular Front for the Liberation of Palestine-General Command
RPG -7	Rocket-Propelled Grenade-7
ROK	Republic of Korea
SAM	Surface-to-Air Missile
SAS	Scandinavian Airlines System/ Special Air Service Regiment
TNA	Thermal Neutron Analysis
TWA	Trans World Airlines
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNSCOP	United Nations Special Committee on Palestine
UK	United Kingdom
US	United States
USSR	Union of Soviet Socialist Republics
VDS	Vapour Detection Systems
VHF	Very High Frequency
ZAPU	Zimbabwe African People's Union
ZIPRA	Zimbabwe People's Revolutionary Army

CHAPTER I

INTRODUCTION

"The closure of a single major international airport anywhere in the world by a terrorist bombing or hostage drama is capable of disrupting the entire global civil aviation system, producing overloads in some places and underloads in others, late or cancelled flights, planes without passengers and passengers without planes, uneaten meals, and idle crews".¹

"While technological advances have produced a remarkable degree of safety in air travel, unparalleled by any other means of transport, criminal attacks against airlines have posed a man-made threat for which there are no simple technical solutions".²

I-1. Introductory Comments on Research Program

The idea for this research came to the current writer in 1987 when two North Korean terrorists blew up the Korean Air Lines Flight 858, killing 115 innocent people. When did aviation terrorism begin? Who exploited it? What were the various types? What were the phases and cycles? What was being done to prevent it? What still needed to be done?

¹ Neil C. Livingstone, "The Impact of Technological Innovation", in Uri Ra'anani et al, Hydra of Carnage: The International Linkages of Terrorism and Other Low-Intensity Operations, Lexington, Massachusetts: Lexington Books, 1986, P. 138

² Eugene Sochor, The Politics of International Aviation, London: Macmillan Press, 1991, P. 144

This research was undertaken from April 1989 to April 1992 at the University of St. Andrews, Scotland under the supervision of Professor Paul Wilkinson. The first difficult problem encountered during this research was a shortage of information owing to the reluctance of authorities to provide any information on this subject, on the plausible but unconvincing basis that: "Silence in this area is certainly golden. Say as little as possible and never reveal anything about your security measures or anti-skyjacking techniques."³ With this tendency, airline officials do not want to reveal details by their responses simply because they do not want to give terrorists any additional information. I have sent numerous letters requesting research materials from civil aviation authorities in many states, but I have not had answers to my letters, apart from five. One of them said, "We are very sorry for not being able to inform you about your requirements since it is a confidential matter." This reflects the difficulty involved in gathering information in this subject. However, the libraries of the Universities of St. Andrews, Aberdeen and Dundee as well as the RISCT special library provided invaluable research material. In addition, the Inter-Library Loan(ILL) system of the British Library Document Supply Centre provided much needed assistance.

I-2. Literature Review

There is much useful information on the origins and the historical development of violence directed against the safety of civil aviation,⁴ but a

³ H. H. A. Cooper, "Aviation: Soft Underbelly Of The Corporate World", Chitty's Law Journal, Vol. 28, 1980, P. 161

⁴ James Arey, The Sky Pirates, New York: Scribners, 1972; E. Blair and W. R. Capt. Haas, Odyssey of Terror, Nashville, TN.: Broadman, 1977; Peter Clyne, An Anatomy of Skyjacking, London: Abelard-Schuman, 1973; Edward F. Mickolus, Transnational Terrorism: A Chronology of Events, 1968-1979,

complete historical survey of aviation terrorism does not exist. Though many papers on the problems of aviation terrorism in America and Middle East have been found,⁵ it is impossible to find a comparative analysis of the regional variations in aviation terrorism worldwide including that occurring in Eastern European, Asian, African and Latin American states.

A great number of descriptive and critical analyses have been devoted to the international conventions and the various agreements concerning aviation terrorism.⁶ There are also many excellent books and articles dealing with

London: Aldwych Press, 1980; Edward F. Mickolus, Todd Sandler, and Jean M. Murdock, International Terrorism in the 1980s: A Chronology of Events, Volume I 1980-1983, Iowa: Iowa State University Press, 1989; David G. Hubbard, Winning Back the Sky, Dallas, TX: Saybrook Publishing Company, 1986; David Phillips, Skyjack: The Story of Air Piracy, London: George G. Harrap & Co., 1973; Christopher Dudley, "Hijacking and Terrorist Attacks against Aircraft and Airport Installations", Journal of the Insurance Institute of London, Vol. 65, 1976-77; Richard Clutterbuck, Living with Terrorism, London: Faber and Faber, 1975; Temple B. Ingram, Jr., "Are Airport Searches still Reasonable?", Journal of Air Law and Commerce, Vol. 44, 1978; J. T. Daily, "Skyjacking: Problems and Potential Solutions - A Symposium - Development of a Behavioral Profile for Air Pirates", Villanova Law Review, Vol. 18, 1973; R. L. Fick, J. I. Gordon and J. C. Patterson, "Aircraft Hijacking: Criminal and Civil Aspects", University of Florida Law Review, Vol. 22, 1969; W. F. Buckley, "The Skyjacker Problem", National Review, Vol. 24, 1972; A. Beristain, "Terrorism and Aircraft Hijackings", International Journal of Criminology and Penology, Vol. 8, 1970; C. Moorehead, "Terrorism in the Air", New Society, Vol. 72, 1985

⁵ Edgar O'Ballance, Language of Violence: The Blood Politics of Terrorism, California: Presidio Press, 1979; Peter Snow, Leila's Hijack War, London: Pan Books, 1970; N. Novick and J. Starr(ed), Challenges in the Middle East, New York: Praeger, 1981; J. B. Wolf, "A Mideast Profile: The Cycle of Terror and Counterterror", International Perspectives, Vol. 2, 1973

⁶ Edward McWhinney, Aerial Piracy and International Terrorism: The Illegal Diversion of Aircraft and International Law, Dordrecht: Martinus Nijhoff, 1987; A. Abramovsky, "Multilateral Conventions for the Suppression of Unlawful Seizure and Interference with Aircraft, Part I: The Hague Convention, Part II: The Montreal Convention and Part III: The Legality and Political Feasibility of a Multilateral Air Security", Columbia Journal of International Law, Vol. 13, 1974 and Vol. 14, 1975; Sami Shubber, Jurisdiction over Crimes on Board Aircraft,

aviation security problems and solutions to preventing hijacking and the sabotage bombing of aircraft in flight.⁷ Many writers, however, failed to provide a perspective of such attacks. For instance, very few writers have pointed out the possibility of missile attacks against civil aviation aircraft in flight which is considered as a great potential threat in the near future.

Many of the books and articles on the problems of aviation terrorism are very superficial, insubstantial and overlap with others. More specific and accurate materials on this subject can be found by referring to the standards and guides published by governments and international organizations. The U.S.

Hague: Martinus Nijhoff, 1972; R. G. Bell, "The U.S. Responses to Terrorism Against International Civil Aviation", ORBIS, Vol. 19, 1976; Gerald F. FitzGerald, "Toward Legal Suppression of Acts against Civil Aviation", International Conciliation, No. 585, November, 1971; Sami Shubber, "Aircraft Hijacking under the Hague Convention 1970-A New Regime?", I.C.L.Q., Vol. 22, 1970; C. S. Thomas and M. J. Kirby, "The Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation", I.C.L.Q., 1973; M. E. Fingerman, "Skyjacking and the Bonn Declaration of 1978", California Western International Law Journal, Vol. 10, 1980; A. E. Evans, "Aircraft Hijackings: What is to be done?", American Journal of International Law, Vol. 67, 1973; Bin Cheng, "The Hague Convention on Hijacking of Aircraft 1970: The Legal Aspects", Aeronautical Journal, Vol. 76, 1972; R. J. McGrane, "A Search for an International Solution to the Problem of Aircraft Hijacking", Auckland University Law Review, Vol. 2, 1975; R. P. Borle, "Jurisdiction over Crimes Committed in Flight: An International Convention", American Criminal Law Quarterly, Vol. 3, 1984

⁷ Kenneth C. Moore, Airport, Aircraft and Airline Security, California: Security World Publishing Co., 1976; Frederick C. Dorey, Aviation Security, London: Granada, 1983; Robin E. Hill, Problems of International Cooperation to Improve Standards of Aviation Security with Reference to the Passenger, Ph.D. Thesis, University of St. Andrews, November 1990; Steven Ashley, "Can Technology Stop Terror in the Air?", Popular Science, Vol. 227, November, 1985; Paul Wilkinson, The Lessons of Lockerbie, Conflict Studies, No. 226, December, 1989; F. C. Dorey, "Security at Airport Terminals", Airport Technology International, 1989; L. Z. Freeman, "Aviation Security Training is a Necessity", ICAO Bulletin Vol. 34, 1979; J. Mendale, "Aviation Safety and Security: Problems and Possible Solutions", ICAO Bulletin Vol. 42, 1987

Department of Transportation's Federal Aviation Administration, with its world-wide activity, is very well placed to accumulate information needed by security specialists. The FAA's Office of Civil Aviation Security tracks aviation terrorism incidents worldwide and it publishes its findings and recommendations on a regular basis for public use. Unlike the aviation authorities in many other states, the FAA is very quick to share their data with the civil aircraft industry at large and makes every effort to respond to public requests for information. One such publication is their annual review of criminal acts against civil aviation. This work details the sabotage bomb attacks against civil aviation and maintains records of aircraft hijackings as well as other significant criminal acts against civil aviation worldwide. The information of the FAA has provided valuable background data on security systems, statistics and chronology.

I-3. Reasons for the Thesis

The international air transportation industry provides a vital communications link which brings prosperity to many states in our modern age. This invaluable link has not only been threatened by terrorism and other factors, but also by failures in the aviation security system. Airlines have been one of the most attractive targets in the eyes of a terrorist for several reasons including particularly the international and symbolic nature of aviation, and the potential of multi-governmental involvement which can inevitably generate wide publicity. Acts of violence against civil aircraft have been committed since the earliest days of civil aviation history. The first attack against civil aircraft dates back to the early 1930s. Since then, aircraft hijackings and other forms of attacks against

civil air transport operations have become one of the most serious challenges to the safety of flying.

The number of direct victims of aviation terrorism is, in a statistical sense, small compared to the human loss resulting from natural disasters and accidents. From 1984 to 1988, throughout the world, 752 people were killed and 136 people were injured in attacks against civil aviation in the form of aircraft hijackings and sabotage bombings of aircraft in flight.⁸ In the same period, in the United Kingdom alone, a total of 1,597,067 casualties occurred in road accidents.⁹ In addition, terroristic attacks directed against civil aviation represent but a small percentage of the total of international terrorist incidents. For example, in 1989 alone, a record of 528 international terrorist incidents were reported.¹⁰ The impact of aircraft hijackings, sabotage attacks upon airborne aircraft and attacks on airline facilities, however, have been far greater than any other types of attacks on civilian population anywhere, in terms of the political, economic, and psychological cost. Aviation terrorism tends to focus on highly dramatic acts, whose impact goes far beyond the act itself. There appears to be an almost unique quality about civil aviation which focuses public attention on aircraft hijackings and sabotage bombings much more than does violence in a more static situation. In fact, aviation terrorism has proven to be an effective tactic when utilised by terrorists for generating mass impact and attracting wide mass media coverage. This was clearly demonstrated by the TWA 847 hijacking of June 1985. Aviation terrorism is not only a concomitant feature of the development of international civil aviation but also of political upheaval

⁸ U.S. Department of Transportation, Criminal Acts Against Civil Aviation: 1989, P. 6 and 12

⁹ Annual Abstract of Statistics, No. 126, London: HMSO, 1990, P. 196

¹⁰ U.S. Department of State, Patterns of Global Terrorism: 1989, P. 1

throughout the world. It is not suddenly going to cease or disappear. It is unlikely that terrorists are going to stop aircraft hijacking. Furthermore, aircraft hijacking is only one of the methods by which international terrorism expresses itself. Sabotage bombing, kidnapping, armed attacks are also means of terrorism, and they need not depend on the presence of a commercial aircraft. The employment of violence against certain airlines, with the intention of discouraging people from using them, is undertaken frequently to attack the national interest of a state. In fact, no other industry in the world has ever been under such violent and sustained terrorist and other criminal attack as that endured by the aviation industry over the past three decades. This was clearly demonstrated after the attacks in Rome and Vienna airports, and the Pan Am 103 disaster. It is also a form of terrorism which presents a great threat and a degree of personal risk to private citizens and crew members as well as others who operate in the air transport system. A large number of deaths and fatal injuries occurring in civil aviation industry have been attributed to such attacks. Terrorists are not concerned about the threat to human rights, property, the integrity of sovereign states or world peace. They are only intent upon undermining and destroying them.

As the numerous domestic and international incidents of violence directed against civil aviation aircraft, airline facilities, and innocent airline passengers and crews continue to increase, aviation terrorism, which has all the elements of terrorist crime, requires to be taken seriously. Dealing with aviation terrorism has become a problem of some magnitude and urgency, and is increasingly recognized as a challenge to the international community. However, the lack of political will and cooperation between governments, national and international organisations, and airlines, the unwillingness of some states to enforce the recommendations of international conventions concerning aviation crime, and

the inadequate training of security staff constitute the current reality of the situation with regard to combatting aviation terrorism. In this respect, it is necessary to evaluate the current problems of acts of violence against civil aviation with a view to tackling such attacks. This led the writer to this subject.

I-4. Thesis Outline

The content of this work consists of 6 Chapters. Following this introductory Chapter, to foster a better understanding of what has been done to air transportation, a brief history and the nature of aviation terrorism will be presented in Chapter II. This Chapter describes the complete historical development of violence against civil aviation and defines the forms of aviation terrorism and classifies aviation terrorists according to their motives. Chapter III analyses and describes the variations of aviation terrorism by geographical regions. The writer examines the problems, trends of aviation terrorism and responses of governments to such acts of violence in this Chapter. In Chapter IV, two different types of acts of violence against civil aviation will be examined in order to study the specific problems of aviation security and international responses. Chapter V discusses the new and potential threat to civil aviation in the future which is drawn from the study of previous Chapters. In this Chapter, the writer examines the special threat of missile attack on civil aviation. Chapter VI examines the ways in which the international community have reacted to such attacks. This Chapter also takes a global view of aviation terrorism. Finally, the concluding Chapter will be presented.

CHAPTER II

AVIATION TERRORISM: ITS NATURE AND DEVELOPMENTS

"That the world is aware of the problem is clear from the many statements of government leaders, academic observers, and journalists. It is recognized that acts of terrorism pose many threats to the existing order. Perhaps the most significant dangers are those relating to the safety of ordinary people, the stability of the state system, the pace of economic development, the acceptance of the rule of law, and the expansion of democracy".¹

II-1. Introduction

This Chapter is a survey. It deals with the principal forms of attack against civil aviation and the classification of the various types of offenders in order to identify their characteristics. At the same time, as one writer said, "Only the past can provide us with some clues about what can be expected in the years come",² and in order to draw a general outline on this subject, this Chapter describes the brief history of attacks against civil aviation. The history of aviation terrorism is not a jumble of unrelated incidents. There have been a number of distinct phases and cycles. Throughout this Chapter, it is intended to establish the main patterns of the attacks.

¹ Y. Alexander and Herbert M. Levine, "Prepare For The Next Entebbe", Chitty's Law Journal, Vol. 25, No. 7, 1977, P. 240

² C. J. Visser, "Civil Aviation Remains Vulnerable to Terrorism", Flight Safety Foundation, 1988, P. 3

II-2. Development of International Civil Aviation

On December 17, 1903, the Wright brothers made their first powered, sustained and controlled aircraft flight in the first flying machine in history to have practical potentialities.³ Since then the development of aircraft has brought human history into new era. The year 1908 was an *annus mirabilis* in aviation history, for the Wright brothers made their first flight in public and the first with a passenger was made on May 14, by Wilbur Wright, taking C.W. Furnas; and the first passenger flight in Europe was made by Farman, taking Archdeacon, on May, 24.⁴

The first international flight took place in 1909 when the French pilot Louis Bleriot crossed the Channel from France to England. But until the outbreak of World War I, the aeroplane was regarded by most authorities, both technical and business, as having potential usefulness only for sporting or military purposes.⁵ The popularity and importance of flying became greatly extended in the public mind, and air transport became a universally accepted mode of travel from 1919. The first civil airline for passengers started on February 15, 1919, when the German "Deutsche Luftreederei" opened a service between Berlin, Leipzig and Weimar.⁶ After some pioneering passenger flights from May to August in 1919, the world's first regular, scheduled, international, daily, commercial passenger and goods air transport service began on August 25

³ Charles H. Gibbs-Smith, The Aeroplane: An Historical Survey of Its Origin and Development, London: Her Majesty's Stationary Offices, 1960, P. 42

⁴ Ibid, P. 59

⁵ R.E.G. Davis, A History of the World's Airlines, London: Oxford University Press, 1964, P. 3

⁶ Charles H. Gibbs-Smith, op.cit, P. 98

between London and Paris.⁷ Air transport then spread erratically and sporadically throughout Europe, and a number of other airlines were opened in 1919, including the Dutch K.L.M.. International routes were first established in the states of Western Europe where, as a result of their limited geographic area, aircraft had to cross national boundaries in order to be used economically.⁸ In the United States, where the first demand was for internal routes across its vast territory, international airline services were not inaugurated until almost ten years after those in Europe.⁹ Interwar years were a great pioneering period, crowned by the opening of regular transatlantic air services in 1939. Thus, by the outbreak of World War II, most major international routes had been established, and a network of airlines connected the continents. The era after World War II has witnessed a revolutionary development in international aviation.¹⁰ Air Transportation made a further step in 1952 when the first jet airliner was put into service by British Overseas Airways Corporation(B.O.A.C.), and it quickly demonstrated the passenger appeal of jet travel.¹¹ Air transport today encompasses some 1600 airports linked by a gigantic cobweb of routes used by about 950 commercial carriers operating 12

⁷ Ibid, P. 99

⁸ Christer Jonsson, International Aviation and The Politics of Regime Change, London: Frances Pinter Ltd, 1987, P. 26

⁹ J.C. Cooper, The Right to Fly, New York: Henry Holt and Company, 1947, P. 17

¹⁰ Christer Jonsson, op.cit, PP. 26-27

¹¹ Keith Hayward, Government and British Civil Aerospace: A Case Study in Post-War Technology Policy, Manchester: Manchester University Press, 1983, P. 19

billion flights every year. The growth of international scheduled air transport is illustrated by the increase in number of passengers carried: ¹²

Table II-1.

**Growth of Global Passenger Flow
(1935-1985)**

Year	No. of Passengers	Passenger/Kilometres
1935	4.6 million	918 million
1945	13.2 million	8000 million
1955	68 million	61,000 million
1965	177 million	198,000 million
1975	534 million	697,000 million
1985	891 million	1,360,000 million

During 1986, the world's international scheduled airlines carried a total 938 million passengers and 14.7 million tonnes of cargo on some 15 million flights. Estimated traffic for 1996 is 1.5 billion passenger journeys.¹³ The social impact of this immense increase in international mobility is incalculable. Diplomacy has been transformed as leaders are able to meet in person rather than entrusting negotiations to delegates; this has tended to produce a style of leadership marked by the individual's ability as a solo performer. Business travel accounts for by far the greater part of passenger/kilometres flown, but the ease with which people of even moderate income can fly to holidays abroad has radically altered the public perception of the world; the 'global village' is, of course, very dependent upon telecommunications but it would never have become a reality without air transport on its present scale.

¹² The Longman Encyclopedia, London: Guild Publishing, 1989, P. 19

¹³ Ibid,

The air transport system is one of the great success stories of the 20th century, epitomizing the growing role of air services in facilitating national and international mobility and expediting worldwide trade. Unfortunately, this high profile and consequent vulnerability air transportation on occasion makes airliners targets of hijacking and other forms of attack promoted by terrorists and others. Although international civil aviation has become a popular means of interstate transportation, its vulnerability to violence and interference was not generally realised until a 1947 hijacking incident. In July of that year, three Rumanian army officers hijacked a Rumanian civilian aircraft carrying ten people to Canakkale province in Turkey and requested political asylum. One of the crew members was shot dead for refusing to pilot the aircraft to Turkey. The officers were taken into custody, but the seven civilians were freed.¹⁴ Thereafter, aircraft to some people not only became a popular means of transportation, but also a tool for escaping, kidnapping, blackmailing, or consummating bizarre notions.

II-3. Defining the Forms of Attack against Civil Aviation

As international air traffic has become principal means of interstate transportation, civil aviation could hardly avoid selection as an easy target of international terrorism. Since February 1931, when Peruvian revolutionaries hijacked a Pan Am F7 Ford Trimotor for use in dispersing propaganda, there have been well over 700 recorded aircraft hijackings and 90 sabotage attacks on airborne aircraft. Although overall incidents against civil aviation are gradually

¹⁴ Edward F. Mickolus, Transnational Terrorism: A Chronology of Events 1969-1979, London: Aldwych Press, 1980, P. 22

diminishing, it is important to note that there have been indiscriminate attacks such as mid-air sabotage bombings and attacks on airport terminals and airline offices. In terms of aviation terrorism, three main categories can be classified. These are aircraft hijacking, sabotage bombing of airborne aircraft, and attack on airline facilities and their users.

II-3-1. Aircraft Hijacking

The expressions 'skyjacking', 'unlawful seizure' and 'air piracy' are now synonymous with the term hijacking, although an authoritative international definition of the crime is hard to find. The term 'aerial piracy', though sometimes used to delineate the act of illegal seizure of an aircraft in flight, does not convey its essential character. 'Aerial piracy' is not piracy in the classical sense, or as defined in the 1958 Geneva Convention on the High Seas.¹⁵ Piracy is covered in Article 14 to 22 of that convention. Article 15 states as follows:

Piracy consists of any of the following:

- (1) Any illegal acts of violence, detention or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:
 - a. On the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft;
 - b. Against a ship, aircraft, person or property in a place outside the jurisdiction of any state;

¹⁵ Alona E. Evans, "Aircraft Hijacking: Its Cause and Cure", American Journal of International Law, 1969, P. 223; See also, Sami Shubber, "Is Hijacking of Aircraft Piracy in International Law?", British Year book of International Law, Vol. 43, 1970, P. 193; Peter M. Jacobson, "From Piracy on the High Seas to Piracy in the High Skies: A Study of Aircraft Hijacking", Cornell International Law Journal, Vol. 5, 1972, PP. 161-187 and George R. Constantinople, "Towards a New Definition of Piracy: The Achille Lauro Incident", Virginia Journal of International Law, Vol. 26, 1986, PP.723-756

- (2) Any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a private ship or aircraft;
- (3) Any act of inciting or internationally facilitating an act described in sub-paragraph 1 or 2 of this article.¹⁶

There have been few recorded incidents when the term 'aerial piracy' could have been applied fairly to aircraft hijackings. For example, on November 6, 1968, a Philippine Airlines twin-engined plane flying from Aub to Manila was hijacked by four men who killed one passenger and wounded another, while robbing everyone.¹⁷ And on June 10, 1973, a Nepalese Airlines Twin Otter on a domestic flight from Birantnagar to Katmandu with eighteen persons on board was hijacked to Forbesganji, India, by three hijackers armed with guns. The plane was carrying a Nepal State Bank shipment of 3 million India rupees, worth approximately \$400,000, which the group seized. The trio escaped into the jungle in a waiting jeep.¹⁸

These cases, however, are exceptional. Robbery and pillage only rarely feature in aviation terrorism. Today's aviation terrorist is not the pirate of old nor the truck hijacker of today. Yet the aviation terrorist does come close to both. He holds people to ransom, and he is a thief of time and services. Although the aviation terrorist's motive may not be material gain in the sense of pockets full of loot, he does rob others for his own gain.¹⁹ As aircraft hijacking did not become a common phenomenon until the late 1960s, no customary international legal definition of hijacking has been developed up to the present.

¹⁶ Geneva Convention, Article 15, A.J.I.L., P. 842

¹⁷ Edward F. Mickolus, op.cit, P. 102

¹⁸ Ibid, P. 393

¹⁹ James A. Arey, The Sky Pirates, London: Ian Allan Ltd, 1973, P. 97

Since there are so many similarities between hijacking and piracy, the term 'aerial piracy' has been frequently applied to hijacking. The intent is to exploit illegal and criminal control over the aircraft and its passengers. Innocent passengers are subjected to torment, worry and danger for long periods, constantly under threat from the terrorists' revolvers, grenades and plastic explosives, and some cases the passengers are brutally murdered.²⁰ The term "aircraft hijacking" has been defined concisely by Edward McWhinney in the following way:

"The forcible diversion of an aircraft in flight, against the will of its air crew"²¹

Modernization produces an interrelated set of factors that significantly predispose the aviation industry to acts, just as increased complexity at all levels of society and economy creates opportunities and vulnerabilities. Sophisticated networks of transportation and communication offer mobility and the means of publicity for terrorists.²² In addition, since World War II much more reliable, smaller and more deadly automatic weapons have been developed. They are compact, easy to conceal and have greater killing power. For example, the Austrian made Glock 17, a 9-mm automatic pistol made almost entirely of plastic, is easy to disassemble and therefore easy to hide in luggage passed

²⁰ Michael Aaronson, "The Terrorism or Freedom Fighting?", A Minefield in International Relations, November, 1986, Vol. 8, P. 628

²¹ Edward McWhinney, Aerial Piracy and International Terrorism: The Illegal Diversion of Aircraft and International Law, Dordrecht, The Netherlands: Martinus Nijhoff Publishers, 1987, PP. 7-8

²² Maratha Crenshaw, "The Causes of Terrorism", Comparative Politics, April, 1981, P. 381

through airport scanners.²³ As the world's technological capacity has improved, one terrorist can carry a great deal of hidden death with him.

The advent of the jumbo jet which is totally under the control of the captain and his crew on flight deck who are responsible for the lives of several hundred passengers confined within a vulnerable cell flying several miles high has provided the terrorist with the ideal target. In fact, on the operational side, aeroplanes are convenient containers of hostages. On international flights, the majority of the hostages will usually share the nationality of the airliner, thus providing a direct challenge to that government. At the same time, the presence of hostages of other nationalities will involve other governments as well. In this situation, terrorists usually have additional advantage. Once terrorists are able to threaten the flight crew, they have virtually achieved control of the aircraft.²⁴ Since once a plane is airborne it is isolated from the possibilities of counter-action or rescue by military or police forces. Aviation technology has achieved such excellence that safety in travel is taken for granted. However, hijackers have come to regard aircraft as the easiest places in the world to execute a crime.²⁵

Another factor also prepared the way for aircraft hijacking to become a popular crime. The speed of travel and instant communications which can bring

23 Rushworth M. Kidder, "Why Modern Terrorism? Three Causes Springing from the Seeds of the 1960s", in Charles W. Kegley Jr. (ed), International Terrorism: Characteristics, Causes, Controls, London: Macmillan Education Ltd, 1990, P. 137

24 Christopher Dobson and Ronald Payne, The Terrorists: Their Weapons, Leaders and Tactics, London: Facts on File, 1979, P. 7

25 David G. Hubbard, Winning Back the Sky, New York: Saybrook Publishing Company, 1986, P. 32

the actuality of terrorist incident into everybody's home are important factors. Modern communication aids the terrorist in his search for publicity by making possible detailed, on-the-spot coverage of his acts even in remote parts of the world.²⁶ Any international flight would involve a wide variety of nationalities and many states are inevitably involved legally, politically and emotionally in solving the problem of aircraft hijacking. Aircraft hijacking naturally draws worldwide public attention.²⁷ Frank Brenchley observed, "Without the oxygen of publicity terrorists would not so often bother to breathe the outside air".²⁸

Finally, the aeroplane has the capability of crossing political boundaries very easily, and is almost uncontrolled unless the people on the ground are willing to shoot the plane down. Thus aircraft hijacking had from the beginning a strong potential for political exploitation. All the circumstances combined to make aircraft hijacking a useful tool of international terrorism.

The following Table 2 on the next page presents a general picture of the changing proportion and development of aircraft hijacking.²⁹

²⁶ Andrew J. Pierre, "The Politics of International Terrorism", ORBIS, Vol. 19, 1975-76, P. 1257

²⁷ Paul Wilkinson, Terrorism and the Liberal State(Second Edition), London: Macmillan Education Ltd, 1987, P. 224

²⁸ Frank Brenchley, Living with Terrorism: The Problem of Air Piracy, Conflict Studies, No. 184, P.ii

²⁹ Data are drawn from U.S. Department of Transportation, FAA, Aircraft Hijackings and Other Acts Against Civil Aviation Statistical and Narrative Reports, Updated: January 1, 1986 (Hereafter Narrative Reports); U.S. Department of Transportation, FAA, Criminal Acts against Civil Aviation: 1986-1990

Table II-2

**Aircraft Hijackings Worldwide
(1931-1990)**

Year	No. of Incidents
1931	2
1931-1946	0
1947	1
1948	7
1949	6
1950	4
1951	1
1952	2
1953	1
1954-1955	0
1956	1
1957	0
1958	8
1959	6
1960	9
1961	11
1962	3
1963	1
1964	2
1965	5
1966	4
1967	6
1968	35
1969	85
1970	74
1971	55
1972	57
1973	22
1974	20
1975	18
1976	15
1977	31
1978	25
1979	23
1980	38
1981	29
1982	30
1983	33
1984	26
1985	26
1986	13
1987	13
1988	15
1989	16
1990	43
Total	821

The overall incidence of aircraft hijackings is diminishing gradually, although some recent serious cases of this form of international terrorism have been attempted such as the TWA 847 hijacking in 1985 and Kuwait Airways hijacking in 1988. Experience has proved that despite increased security precautions, it is still possible to smuggle arms on board aircraft. Indeed the more people being processed before the flight, the more likely it is that terrorists can evade the security checks. There have also been instances of ground crew, cleaners and caterers planting weapons on board aircraft so that terrorists, who pass the security checks clean, have their guns and grenades waiting for them. This is precisely what happened when a Palestinian terrorist group hijacked an Olympic Airways plane flying from Beirut to Athens on July 22, 1970, in order to secure the release of fellow terrorists jailed in Greece. The weapons were smuggled on board by cleaners at Beirut.³⁰ It is also worthwhile to note that hasty superficial searches are unfortunately all too common in many international airports. An instructive incident took place in May, 1972, when Sabena Airlines flight 517 was hijacked by four terrorists of Black September including two female terrorists. The female terrorists hid hand grenades in their cosmetic boxes and detonators in their special brassieres.³¹ In addition, as Rodney Wallis, the former director of security of IATA, observed, "Complacency brought on by the monotony of the work and where the chance of successfully identifying a terrorist is perhaps more remote than finding a pearl in a restaurant oyster."³² There is always the factor that after checking so many

³⁰ Dobson and Payne, *op.cit*, P.7

³¹ Edward F. Mickolus, *op.cit*, PP. 313-314

³² Rodney Wallis, "Aviation Security", Paper for Discussion at University of St. Andrews, October 10, 1991, P. 21

people and bags without finding anything, security officers tend to get somewhat complacent.

We can see trends of aircraft hijacking ranging from the flight of Eastern bloc refugees in the 1940s and 1950s, to the evolution of Palestinian acts in the 1960s and 1970s. This propensity for trends to develop could account, in fact, for the re-emergence of aircraft hijackings in the 1980s. The motive force behind this latest upsurge might be identified as the phenomenal successes of the pro-Iranian Shia fundamentalist terrorists of Hezbollah in the hijacking of a TWA airliner to Beirut in 1985 and a Kuwait Airways aircraft to Iran, which subsequently went on to Algeria in 1988.

Governments and aviation authorities adopted the view that the popularity of aircraft hijacking as a terrorist side-show diminished simply because frequent repetition took away some of its shock value and the method became old fashioned. This was a total miscalculation. Despite the decline of overall aircraft hijackings, it remains a serious problem.

II-3-2. Sabotage Bombing of Airborne Aircraft

The number of aircraft hijackings reached its climax in 1969 with eighty-five incidents. Since then, there has been a gradual decline, sixteen aircraft hijackings having been reported for 1989. The reasons for this decline are increased world attention to aviation security and increased world-wide emphasis on anti-terrorist measures. However, this encouraging decline in aircraft hijackings has been accompanied by an increase in the number of indiscriminate acts of sabotage bombing against airborne aircraft. In fact, sabotage bombing of airborne aircraft is not new at all. The first incident of this form of aviation

terrorism took place on May 7, 1949, when a Philippine Air lines DC3 crashed into the sea between Daet and Manila, killing all thirteen people aboard. A time bomb had been delivered to the plane by two ex-convicts who were hired for the job by a man and woman who were attempting to kill the woman's husband.³³ After this initial incident, there have been 93 such attacks until 1990. As a result of such attacks, in all 2,187 people have been killed.

The following Table II-3 on the next page illustrates the current development of a serious trend towards the greater use of sabotage bombings of airborne aircraft and reveals that this form of aviation terrorism has caused many fatalities.³⁴

³³ Edward F. Mickolus, op.cit, P. 28

³⁴ Data are drawn from the Report of the Presidents Commission on Aviation Security and Terrorism, U.S. Government Printing Office, 1990, and Narrative Reports, op.cit; U.S. Department of Transportation, FAA, Criminal Acts Against Civil Aviation: 1990,

Table II-3

**Sabotage Bombing of Airborne Aircraft
(1949-1990)**

Year	No. of Incidents	No. of Killed
1949	2	36
1950-54	2	0
1955	2	60
1956	1	0
1957	2	1
1958	0	0
1959	1	1
1960	2	47
1961	0	0
1962	1	45
1963	0	0
1964	1	15
1965	1	52
1966	1	28
1967	4	66
1968	1	0
1969	4	33
1970	9	84
1971	2	25
1972	7	114
1973	5	92
1974	5	161
1975	4	1
1976	5	168
1977	1	0
1978	3	5
1979	2	0
1980	1	0
1981	3	2
1982	2	1
1983	2	112
1984	2	0
1985	7	390
1986	3	20
1987	1	115
1988	2	287
1989	2	278
1990	0	0
Total	93	2187

It is worthwhile noting that there is a very important distinction between conventional bombings and explosive devices placed aboard aeroplanes. The sabotage attacks of airborne aircraft are much more serious. Even though bombing at airline facilities may cause several casualties, there is no basic difference in terms of modus operandi and consequences from other terrorist bomb attacks in public places. However, the sabotage bombing of airborne aircraft cause a large number of casualties as a result of explosive devices mostly designed to explode in mid-flight. For example, the mid-air bombing of Korean Airline flight perpetrated by North Korean agents in November 1987 resulted in 115 casualties,³⁵ the December 1988 mid-air bombing of Pan Am 103 above Lockerbie, Scotland resulted in 270 casualties including 11 on the ground at Lockerbie in what was one of the world's worst ever air disasters,³⁶ and in 1989 two mid-air bombings of the French UTA airliner over Sahara and the Colombian Avianca airliner over Bogota resulted in the loss of 171 and 107 innocent lives.³⁷ Moreover, sabotage bomb attacks against civil aviation have special advantages for terrorists. In a successful bomb attack, it is not likely that the perpetrators will be identified easily. For example, if Hindawi had conducted his operation of El Al sabotage bombing with success, who would have suspected one of the victims, let alone a pregnant woman, to be the carrier of the fatal explosive.

³⁵ The Korea Herald, January 19, 1988

³⁶ U.S. Department of State, Patterns of Global Terrorism, 1988, March, 1989, P. 51

³⁷ Report of the President's Commission on Aviation Security and Terrorism, op.cit, P. 161

This form of brutal attack against innocent civil aviation needs a far higher level of sophistication than the other forms do, particularly when the airlines have the proper security measures. Terrorists have taken advantage of all kinds of peculiar methods and means like the selection of naive travellers who are unknowingly carrying explosives, and are supposed to die with the other passengers. This has also included the use of special explosives such as Semtex, elaborate methods of disguise that pass normal luggage security checks, barometric pressure-operated detonators that activate the explosives when the aircraft reaches a predetermined altitude, and sophisticated trigger mechanisms such as radio signals instead of direct wire connections.³⁸ In particular, the development of Semtex is one of the greatest concerns at this stage. The Czech-made Semtex, the best known of the plastic explosives and frequently used by terrorists, is extremely difficult to detect by most currently employed security screening systems and by vapour sniffers as a result of its lack of odour and very low vapour pressure at normal temperature and pressure. It can be shaped to fit into radios, or formed into thin sheets in luggage. On 22 March 1990, Czechoslovakia's new president Vaclav Havel, revealed that the former Communist government of Czechoslovakia sold more than 1,000 tons of Semtex to Libya's Colonel Gaddafi, armourer and paymaster to some of the world's most vicious terrorist organizations. He also revealed that Libya had refused to hand back any of the explosive, which is manufactured at a plant outside Prague. Many people were shocked by the amount of the explosive shipped to the unstable Gaddafi. Most of it is already in the hands of terrorist organizations throughout the world. It is known that 200 grams of Semtex is enough to blow

³⁸ North Atlantic Assembly, Sub-Committee on Terrorism, Draft Final Report, November 1988, P. 22

up a jumbo jet like the one at Lockerbie. This means that world terrorism has enough Semtex to last 150 years.³⁹ For the sophisticated reasons, mentioned above, sabotage bombing of airborne aircraft has almost all of the time been committed by terrorist organizations which have received state sponsorship, or directly by state intelligence services.⁴⁰

The destruction of Pan Am 103 over Lockerbie and UTA over Niger have demonstrated that such attacks are the biggest terrorist threat that the international community confronts at the current stage. With the recognition that the security measures which were developed in the early phases of modern terrorist activity do not provide adequate protection against terrorist bombs, research into explosives detection has been accelerated in the last decades to tackle the problem. Although several new techniques have been developed, they also have failed to provide a complete answer. Further serious problems, however, arise from the passive approach of the civil aviation authorities. Most of the terrorist bomb attacks have been conducted sporadically and so time is gained for alarm to subside. As the last episode fades from the public consciousness, efforts to provide effective security measures normally decline, until the next disaster when public demand for better security sharply rise. How many more innocent passengers have to die at the hands of terrorists before the authorities start to act effectively? It is no use closing the stable door after the horse has bolted.

³⁹ The Daily Telegraph, March 23, 1990; The Sunday Post, May 27, 1990; The Daily Mail, March 23, 1990

⁴⁰ Ariel Merari, "International Terrorism and Civil Aviation", in Inter: International Terrorism 1987, Jaffee Centre for Strategic Study, University of Tel Aviv, Israel, 1989, P, 74

II-3-3. Attack against Airline Facilities and Their Users

Airline facilities increasingly have come under attack as pre-boarding security procedures render aircraft hijacking more difficult to initiate, prompting a move in many cases to easier targets. The same "soft-target-attractiveness" has resulted in increasingly frequent attack upon airline facilities including airline offices which are located in major foreign cities apart from airports. Attacks against airline facilities can be categorised into two main types: bombings of airport or airline offices and armed assaults against passengers. The following Table II-4 illustrates the development of such attacks.⁴¹

Table II-4

Attack against Airports and Airline Offices (1975-1990)

Year	Airport	Airline office	Total
1975	7	4	11
1976	5	8	13
1977	8	13	21
1978	6	7	13
1979	8	23	31
1980	7	32	39
1981	9	20	29
1982	7	21	28
1983	6	21	27
1984	6	9	15
1985	8	19	27
1986	5	16	21
1987	5	10	15
1988	6	9	15
1989	5	1	6
1990	5	3	8
Total	103	217	320

⁴¹ Data are drawn from Narrative Reports, op.cit; U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation, 1981-1985 and Criminal Acts Against Civil Aviation, 1986-1990

The most notorious terrorist attack at an airport took place in 1972 with the bloody assault on passengers at Lod Airport in Israel by Japanese terrorists. The terrorists began to hurl grenades toward a milling crowd in the custom house and opened fire with submachine guns which they had calmly removed from their luggage and assembled. Twenty-eight innocent persons were killed and more than seventy were wounded in the assault, many of whom turned out to be Puerto Rican pilgrims on their way to visit the Holy Land.⁴² This incident shocked the world both in its ferocity and its international quality. Since then, the total number of terrorist attacks against airline facilities and their users has gradually increased. This form of brutal attacks provides an indirect indicator of the threat to civil aviation aircraft, which terrorists would attack directly if security measures were less stringent. For instance, aviation terrorists have difficulty in getting near El Al airliners, but they frequently attack El Al airline offices.

Most of the efforts invested in securing civil aviation have focused on airliners to halt the problem of aircraft hijacking and sabotage bombing of airborne aircraft. As a result, airports and airline offices are still almost as exposed to terrorists attacks as they were two decades ago. Though uniformed security staff maintain a conspicuous presence at international airports, they hardly constitute a deterrent factor against highly trained terrorists who intend to plant a bomb in airport areas open to the general public. Moreover, it was demonstrated during the attacks at Rome and Vienna airports that security staff are not adequately trained to deal effectively with a surprise armed assault. Security conditions at airline offices are even worse. With a very few exceptions no security measures have been taken to deal with such attacks. It is not

⁴² Edward F. Mickolus, *Transnational Terrorism*, op.cit, PP. 321-324

surprising therefore to note that 320 attacks against airline facilities were recorded between 1975 and 1990. This statistic illustrates that the occurrence of such attacks is a matter of grave concern to the safety of civil aviation. The international community should now recognize that such attacks, which pose a great danger not only to the safety of passengers but also to the safety of persons at airports serving international civil aviation, could undermine the safe and orderly conduct of civil aviation for all states. For the purpose of deterring such acts of violence against airline facilities, there is an urgent need to introduce appropriate security measures.

II-4. Brief History of Aviation Terrorism

II-4-1. The Early Years

The first recorded attack against civil aviation occurred on February 21, 1931, when a group of Peruvian revolutionaries hijacked a mail aircraft, a Pan American F-7 Trimotor, for use in dispersing propaganda leaflets.⁴³ The second took place two days later, also in Peru, for a similar purpose.⁴⁴ After these initial attempts no further aircraft hijackings occurred until the end of World War II. In the post World War II period, communists gained control of the Eastern European states. For the political dissident in these states, the best route to freedom was to flee to neighbouring Western states. For example, on May 5, 1948, three men and two women, all anti-communists, hijacked a

⁴³ Edward F. Mickolus, *op.cit.*, P. 8

⁴⁴ Colonel Cerro ordered Elmer Faucett to fly over Arequipa and drop government newsletters. See, *Ibid*, P. 8

Czechoslovakian domestic commercial flight from Brno, Moravia, to Ceske, Budegovice to the U.S. zone of Germany, landing in Munich, where they requested political asylum.⁴⁵

At the early stage, nearly all of the successful hijackings were committed by persons trying to escape from communist bloc states.⁴⁶ Aircraft hijacking was simply another means of escaping to freedom, like coshing a border guard, stealing a lorry, hiding on a train, swimming a river, or walking through a wood. Hijackers were usually granted political asylum. And at the time, most of hijacking were regarded in the west with some sympathy. This tendency, in fact, encouraged hijacking from the East to West.

On the one hand the motive for hijacking in its early years was the desire to gain political refuge status but on the other hand there were also other motives. In 1958, Raul Castro who could claim to be the father of the modern crime of aircraft hijacking began to exploit hijackings for political purposes. In that year, Raul Castro's Column 6, a group of Cuban revolutionaries, hijacked a Cubana Airlines DC3 and landed at a camouflaged rebel airstrip to harass President Batista's internal communications two weeks before Cuba's presidential elections.⁴⁷ This was the first instance of using aircraft hijacking as a guerrilla tactic.

⁴⁵ Ibid, P. 25

⁴⁶ Temple B. Ingram, Jr., "Are Airport Searches Still Reasonable?", I.A.L.C., 1978, P. 132; Richard Clutterbuck, Living with Terrorism, London: Faber and Faber Ltd, 1975, P. 95, Edgar O'Ballance, Language of Violence: The Blood Politics of Terrorism, California: Presidio Press, 1979, P. 67; Paul Wilkinson, Terrorism and the Liberal State, London: Macmillan Education Ltd, 1987, P.225

⁴⁷ Edward F. Mickolus, Transnational Terrorism, op.cit, P. 45

Following the Fidel Castro take over of Cuba, 1959 and 1961 saw a number of aircraft hijackings by refugees seeking to flee from Cuba to the United States. Generally the escaping Cubans would commandeer aircraft and fly the ninety miles to Florida where they would seek asylum. This situation was reversed when the first hijacking of a U.S. plane began on May 1, 1961. National Airlines flight 337 was hijacked to Havana by Antulio Ramirez Ortiz. The hijacker was taken away by Cuban soldiers, and the plane and passengers were briefly detained and then released.⁴⁸ This was followed by a period of refugees alternately hijacking aircraft from Cuba to America and of American aircraft to Cuba.⁴⁹ In the following years until 1967, there were 12 instances of attempts to hijack American aircraft to Cuba including 3 private charter planes.⁵⁰ The character and motivations of these hijackers were various: there was a father-son team who merely did not want to stay in the United States any longer; a couple of Cuban exiles who had been charged with crime and were fleeing from the law.

⁴⁸ Ibid, PP. 51-52

⁴⁹ Richard Clutterbuck, Living With Terrorism, London: Faber and Faber, 1975, P. 95

⁵⁰ U.S. Department of Transportation, Aircraft Hijacking and Other Criminal Acts Against Civil Aviation Statistical and Narrative Report, Updated: January 1, 1986, Federal Aviation Administration(F.A.A.), Office of Civil Aviation Security, May 1986

II-4-2. The Change in Complexity and the Epidemic Growth of Aviation Terrorism Beyond Control

Terrorist attacks upon international civil aviation in the form of aircraft hijacking began to flourish in the late 1960s. There have also been many acts of sabotage on aircraft and aviation facilities. In 1968, the number of aircraft hijackings jumped dramatically. In that year there were thirty-five such incidents. This increase continued in 1969 when there were eighty-five recorded aircraft hijacking attempts world wide which was almost the same total as hijacking attempts for the whole period 1931-1967. Professor Paul Wilkinson pointed out two major new breeds of aviation terrorists active from 1969 as below:⁵¹

1. United States criminals seeking ransom or escape from the law
2. Palestinians employing hijacks as a political weapon in desperation as a means of publicising their cause and avenging Arab defeat in the 1967 war

The sudden surge of aircraft hijackings, that hit the United States almost like a craze in 1968-69, were committed by criminals after ransom and they were generally arrested and convicted or handed back for trial, others were mentally unbalanced and some claimed to be political refugees and asked for asylum. Over half of the total aircraft diverted to Cuba between 1968 and 1970 were United States aircraft. This dramatic situation will be discussed in the following Chapter in detail.

By this time the focus on aircraft hijacking had long since passed from the Caribbean to the Middle East, and chief exponents have been the Marxist

⁵¹ Paul Wilkinson, *Terrorism and the Liberal State*, op.cit, P. 225

Popular Front for the Liberation of Palestine.⁵² The hijacking by the group known as PFLP began in 1968, after the Arab defeat in the 1967 war, which deprived them of nearly all their land bases for "Fedayeen" raids across Israel's borders. They initially made an assault on Israeli citizens and aircraft. However, the P.F.L.P. does not restrict its list of targets to Israel. The first aircraft hijacking by the Palestinian terrorist organizations occurred on July 22, 1968 when a El Al aircraft was hijacked. Aviation terrorism by Arab terrorist groups was not fought only in the air. After the success of the first aircraft hijacking, the PFLP shifted their efforts to attack El Al aircraft on the ground in European airports; one at Athens in December 26, 1968, and another at Zurich in February 18, 1969, killing one Israeli in each case and wounding a number of others.⁵³ This incident was followed by some 30 acts of aviation terrorism committed by Palestinian terrorist groups until 1972.⁵⁴ These had their counterpart in political aircraft hijackings by such factions as the Eritrean Liberation Front, the Japanese Red Army, the Kashmiri National Liberation Front and the Thai Black September as well as Iranian Communists and Philippine Maoists.⁵⁵

In the context of the Mediterranean and Middle East, especially after the resumed Arab-Israeli military conflict of June, 1967, aviation terrorism seems to have developed merely as one means, among a number of available alternative, competing means, for trying to achieve political objectives without recourse to

⁵² Alona E. Evans, "Aircraft Hijacking: What is being done?", American Journal Of International Law, 1973, P. 644

⁵³ Edward F. Mickolus, op.cit, PP. 105-106, and PP. 113-114

⁵⁴ Ariel Merari and Shlomi Elad, The International Dimension of Palestinian Terrorism, J.C.S.S. Study No.6, 1986, pp. 109-110

⁵⁵ Alona E. Evans, op.cit, P. 645

direct military action or military confrontation, with all the risk of a further disastrous defeat that any such military action might seem to involve. The advantage of aircraft hijacking, in this respect, as a weapon for achieving major national objectives by non-military means, has been the usually small expenditure of money and energy and lives that such action seems to have involved.⁵⁶

The escalation of attacks against civil aviation at this stage was also mainly due to the fact that there seemed to be no coherent defence against such attacks as the world aviation industry was faced with the gigantic task of checking individually the millions of passengers who travelled each year.⁵⁷

II-4-3. The decline?

Over the past few years, there has been an overall decline in reported attacks against civil aviation throughout the world. Increased attention to airport and aviation security and the implementation of anti-terrorism measures by a number of states may have contributed to this decline. Nonetheless, civil aviation continues to be an attractive target for terrorists, or individuals with other criminal motives, because of its high profile and vulnerability as an unparalleled attention-getting device.⁵⁸

⁵⁶ Edward McWhinny, Aerial Piracy and International Law, New York: Oceana Publication, 1971, P. 17

⁵⁷ P.I.R. Abeyrante, "Aerial Piracy and Extended Jurisdiction in Japan", International and comparative law Quarterly, 1984, P. 598

Because the United States experienced an epidemic of aircraft hijacking, mainly by Cuban exiles, between 1969 and 1970, measures were taken including rigorous searches and the introduction of sky-marshals. Between 1974-1978, there were relatively few hijackings in the United States, with an average rate of only eight per year. The number of incidents world-wide has shown similar fluctuations.

From 1981 to 1985 there was almost the same total of aircraft hijackings every year worldwide. In 1986 and 1987, there were 13 hijackings each world-wide. This worldwide total was the lowest number of hijackings in the last decades. On the contrary, in recent times, deaths and injuries due to hijackings have reached a high point. For example, ninety-one people were killed and 178 were injured during 1986.⁵⁹ In 1988, there were 15 aircraft hijackings world-wide. While this total indicates a slight increase over the totals reported during 1986 and 1987, it nevertheless represented a substantial decrease from the total world-wide aircraft hijackings which occurred in 1984 and 1985. However, this downward trend burst like a bubble once again in 1990, as significantly more aircraft hijackings occurred than during any previous years in the 1980s. There were 43 aircraft hijackings worldwide. Although the dramatic increase in 1990 was the result of a sizable number of hijackings in the former Soviet Union arising from the political and social unrest, this upward trend demonstrates that the potential for aircraft hijacking remains very high.

58 David G. Hubbard, Winning Back the Sky, Texas: Saybrook Publishing Company, 1986, P. 37; U.S. Department of Transportation, Criminal Acts against Civil Aviation: 1988, P. 3

59 U.S. Department of Transportation, Criminal Acts against Civil Aviation: 1986

In addition to aircraft hijacking, the use of explosive devices by terrorists for the sabotage bombing of aircraft in flight has posed a serious threat to civil aviation since early 1980s. The destruction of Pan Am Flight 103, in 1988, by an explosive device was a tragic example of the gravity of this threat. The average number of such incidents per year has not fluctuated significantly, however, the average number of persons killed in each incident has steadily increased. Various brutal attacks have been directed also against airline facilities and their users.

II-5. Classification of Aviation Terrorists

Who are the aviation terrorists and what are their motives? An aviation terrorist may be as young as sixteen⁶⁰ or as old as seventy-four.⁶¹ He or she may be a dropout from everyday life, a political fanatic, a common criminal and extortionist, a malcontent, a mentally deranged person, or rebel with or without a cause.⁶² He or she usually acts alone, although there have been several instances of two, three or four. In some cases, the hijacker has been

⁶⁰ On November 11, 1965, Thomas Harvey Robinson, sixteen years old, attempted hijacking U.S. National Airlines to Cuba., Edward F. Mickolus, *Transnational Terrorism*, op.cit, P. 68

⁶¹ On August 14, 1969, John Scot McCreery, who was born on August 14, 1895, attempted hijacking U.S. Eastern Airlines flight. This is a hijacking attempt by the oldest recorded hijacker., *Ibid*, P. 128

⁶² Alona E. Evans, "Aircraft Hijacking: Its Cause and Cure", American Journal of International Law, 1969, P. 700; A. Abramovsky, "The Constitutionality of the Anti-Hijacking Security System", Buffalo Law Review, Vol. 22, 1972-73, P. 126

accompanied by members of his family.⁶³ An aviation terrorist just does not fit neatly into any single category. It is difficult for us to see a single definite pattern to which an aviation terrorist may conform. Given the incidence of aviation terrorism, one must necessarily inquire as to who the aviation terrorists are and why they make attempts to attack civil aviation. Broadly speaking, aviation terrorists fall into three main categories: political terrorists, asylum seekers, and criminal extortionists.

II-5-1. Political Terrorist

This category of aviation terrorist is dedicated to a political goal which he sees as one having transcendent merit. The aim of Palestinian terrorist organizations has been to gain political salience for the Palestinian cause. By making their goal appear viable to other Arab States, they have received financial and political support from Arab states that support, or feel compelled to support, their cause. The aviation terrorist of this type seeks attention and publicity for his cause. The world becomes his stage as the contemporary media enables him to dramatize his goals effectively, and his attempt to win over public opinion. A display of determination and devotion to the cause focuses world attention upon it and may increase sympathy. After the most spectacular aircraft hijacking by Palestinian terrorists in September 1970, known as Hijack Sunday when three airliners were hijacked to Dawson's Field in Jordan, although this

⁶³ In 1969, U.S. National Airlines flight was hijacked to Cuba by Jorge Carballe Delgado. He was accompanied on the plane by his wife, a newborn baby and two sons. See, Edward F. Mickolus, *Transnational Terrorism*, op.cit, P. 131

acts caused a wave of revulsion all over the world, many people began to ask: who are the Palestinians? what do the Palestinians want? and what is the Palestinian problem?⁶⁴ Without terrorist acts the Palestinian problem would presumably have attracted scant attention and would have occupied a lower position on the international agenda than it is recent years.⁶⁵

Political terrorists also attempt to destroy support for the established political leadership and debilitate the authority of the state by destroying normality, building feelings of distrust and hostility toward the government among the target State's population and damaging the economy in the target States.⁶⁶ Attacks on civil aviation aircraft, airports and airline offices have sought to curtail air travel and tourism as a consequence of psychological disruption and the spread of fear. After the terrorist attacks at the airports in Rome and Vienna in 1985, the tourist industry suffered losses from many tourist cancellations in Italy. The losses were believed to reach \$300 million.⁶⁷ The losses of other States could be similar to Italy.⁶⁸ Once again, this situation became worse at the height of the Gulf crisis. The airline industry has been in deep financial trouble since the Gulf conflict. Although airlines are trying to find ways to increase the

⁶⁴ Henry Cattani, Palestinian Question, London: Croom Helm Ltd, 1988, P. 120

⁶⁵ Andrew J. Pierre, "The Politics of International Terrorism", ORBIS, Vol. 19, 1975-76, PP. 1254-1255

⁶⁶ Ariel Merari, "A Classification of Terrorist Groups", Terrorism: An International Journal, Vol. 1, No. 3-4, PP. 335-336

⁶⁷ Henryk Handszuh, "Terrorism and Tourism", in Aryeh Lewis and Meir Kaplan(ed), Terror in the Skies: Aviation Security, The Proceedings of the first International Seminar on Aviation Security, Israel: I.S.A.S, 1990, P. 71

⁶⁸ Ray Bar-On, "The Effects of Terrorism on International Tourism", in Ibid, PP. 85-103

number of passengers through improved service, the importance of ensuring a high standard of security to prevent attacks by terrorists cannot be ruled out.

Sometimes the intent is to bring about release of imprisoned terrorists in foreign gaols. Aircraft hijacking appears to be a useful method of securing the release of terrorists.⁶⁹ These hijackers hold the passengers of the aircraft hostage while bargaining for the release of their imprisoned colleagues. According to U.S. Department of Transportation, there have been 26 such hijacking incidents world-wide from 1977 to 1988.⁷⁰ This tactic has been frequently used by Middle Eastern terrorist organizations including the PFLP and Hezbollah.

The overall number of politically motivated terrorist attacks in the form of aircraft hijacking have gradually decreased. However, this trend has been accompanied by an increase in the number of sabotage attacks since the early 1980s. The following Table II-5 on the next page illustrates the current development of a worrying trend towards the greater use of sabotage tactics by political terrorists.

⁶⁹ Paul Wilkinson, *Terrorism and the Liberal State*, op.cit, P. 246; Richard Clutterbuck, *Kidnap, Hijack and Extortion*, London: The Macmillan Press Ltd, 1987, P. 57; Andrew J. Pierre, op.cit, P. 1225; Narinder Aggarwala, "Political Aspects of Hijacking", in Narinder Aggarwala, Michael J. Fenello and Gerald F. FitzGerald(ed), *Air Hijacking: An International Perspective*, International Conciliation, No. 585, November 1971

⁷⁰ U.S. Department of Transportation, *Criminal Acts against Civil Aviation: 1986 and 1988*, PP. 17-26 and PP. 21-25

Table II-5

**Significant Sabotage Attacks by Political Terrorists
(1983-1990)**

Date	Target	Type of Incident
07/15/1983	Paris Orly Airport	Bombing
09/23/1983	Gulf Air B-737	Explosion In Flight
03/10/1984	UTA DC-10	Explosion In Flight
08/31/1984	Kabul Airport	Bombing
06/23/1985	Air India B-747	Explosion In Flight
12/27/1985	Rome Airport	Armed Attack
12/27/1985	Vienna Airport	Armed Attack
04/02/1986	TWA B-727	Explosion In Flight
05/03/1986	Air Lanka L-1011	Explosion On Ground
09/14/1986	Kimpo(Seoul) Airport	Bombing
11/29/1987	KAL B-707	Explosion In Flight
01/03/1988	BOP Air Bandeirante	Explosion In Flight
12/21/1988	Pan Am B-747	Explosion In Flight
09/20/1989	UTA DC-10	Explosion In Flight
11/27/1989	Avianca B-727	Explosion In Flight

The most unmanageable component of the politically motivated aviation terrorism is ideological. Professor Paul Wilkinson correctly observes on this problem:

"... Fanatically determined revolutionary terrorists are prepared to take much higher personal risks for their cause, often to the point of sacrificing their own lives. ... the more desperate a revolutionary group becomes for publicity or tactical success, the more it will be tempted to throw caution to the winds and bring off a daring terrorist *coup*. Very often a fresh hijack or airport attack is undertaken as an act of vengeance for an earlier defeat or failure, and to show that the terrorists are still determined to wage war until final victory."⁷¹

⁷¹ Paul Wilkinson, op.cit, P. 247

Kozo Okamoto, one of the members of Japanese Red Army who fired machine guns and threw hand grenades at passengers arriving from Air France flight in May 1972, once said:

"When I was child, I was told that when people died they became stars. I did not really believe it, but I could appreciate it. We three Red Army soldiers wanted to become Orion when we died. And it calms my heart to think that all the people we killed will also become stars in the same heavens. As the revolution goes on, how the stars will multiply!"⁷²

This image affords considerable insight into the beliefs and emotions which made Okamoto's mission of terror possible. Besides revealing the revolutionary's attitude towards his victims, it illustrates a view of his own death which permitted him to accept such an assignment. Ideological belief about death and the judgement of history made it possible for terrorists to perform a nearly suicidal terrorist act.

Political terrorist acts against civil aviation are a grave threat in Western Europe, the Middle East, and increasingly Africa and Asia have frequently been deeply involved in the Arab-Israeli conflict. Some Middle Eastern States, such as Iran, Syria, Lebanon, and Libya, have provided safehavens to terrorists for their own gain.⁷³ For example, Libya released the five members of the Japanese

⁷² Patricia G. Steinhoff, "Portrait of a Terrorist: An Interview with Kozo Okamoto", Asian Survey, Vol. 16, July-December, 1976, P. 842; Yoshihiro Kuriyama, "Terrorism at Tel Aviv Airport and a "New Left" Group in Japan", Asian Survey, Vol. 13, January-June, 1973, P. 339

⁷³ U.S. Department of State, Libya's Qadhafi Continues Support for Terrorism, Office of the Secretary of State, January 1989, P. 2; Yonah Alexander, State Sponsored Terrorism, The Centre for Contemporary Studies, Occasional Paper, No. 3, June, 1986, PP. 9-11; Paul Wilkinson, op.cit, P. 246; Bruce Hoffman, Recent Trends and Future prospects of Iranian Sponsored International Terrorism, RAND Report 3738-USDP, March 1990

Red Army who hijacked and blew up a Japanese airliner in July, 1973 at Benghazi, Libya.⁷⁴ This is, in part, one of the factors which makes it extremely difficult to eradicate political terrorist acts against civil aviation.⁷⁵

Because of the incidence or at least the threat of aviation terrorism which has been mounting in recent years as a result of the apparent spectacular political success of several early attempts, aviation terrorism by the political terrorists is the most difficult to control. For an effective reduction in the scale of aviation terrorism to be achieved, resolution of the key political conflicts in the international system is required. In the words of Professor Paul Wilkinson:

"We must also make progress in negotiations and diplomacy to resolve some of the underlying conflicts in the international system that inevitably fuel violence. For example, a settlement of the long and bitter conflict between Israel and the Arab states on the Palestinian Issue is a long way off. Even if we were to achieve it by some miracle of diplomacy, Middle East terrorism would not be eradicated. But at least it would be substantially reduced. Instead of despairing young Palestinians in the camps flocking to terrorist groups like the Abu Nidal movement, their energies could be channelled into creating and developing their own homeland."⁷⁶

It should be remembered that the harvest of justice can not be produced from seeds that have not been sown in peace.

⁷⁴ Edward F. Mickolus, *Transnational Terrorism*, op.cit, PP. 398-340

⁷⁵ Paul Wilkinson, *Terrorism and the Liberal State*, op.cit, P. 246

⁷⁶ Paul Wilkinson, "Wanted: An International Criminal Court", The Observer: World Press Service for Schools, December 1986, P. 17

II-5-2. Asylum Seeker

This category of aviation terrorist has comprised those who claim political motivation for their acts and are willing to take enormous risks to escape from a political or social system that they detest. Included in this group have been left-wing revolutionaries, such as the Black Panthers of the United States and Latin American militants; as well as radicals and right-wing politicians and opponents of Communist and fascist systems. Also included in this category are those individuals who are denied the right to leave a particular State to settle elsewhere, for example, Soviet Jews.⁷⁷

This type of attack on civil aviation was the characteristic form of hijack from Eastern Europe after World War II and it again became prevalent in the spate of Cuban hijacks in 1958-1962.⁷⁸ When Fidel Castro established his Cuban revolutionary government in 1959, Cuban political dissidents fled the State as soon as he seized power. By the early 1960s, many Cuban airlines had been hijacked to the United States by these dissidents. The U.S. government acting in accordance with its political ideology and humanitarian considerations, granted asylum to Cuban hijackers whether they had caused loss of lives or not. In the Western Hemisphere, a similar situation took place as Communists took over the Eastern European states. Thousands of dissidents fled their states to go to the non-Communist states by whatever means of transportation were available. From 1947 to the 1950s, there were a number of aircraft hijackings in which airliners were diverted from Rumania, Czechoslovakia, Yugoslavia, Bulgaria, Hungary and Poland to Turkey, West Germany, Italy Austria, Greece, Sweden,

⁷⁷ Narinder Aggarwala, *op.cit*, P. 12

⁷⁸ Richard Clutterbuck, *Living with Terrorism*, *op.cit*, P. 95; James A. Arey, *The Sky Pirates*, London: Ian Allan Ltd, 1973, PP. 50-74

Denmark and Switzerland. Nearly all the hijackers were granted asylum. Generally, Western democratic states were quite sympathetic to this form of aviation terrorism arising within Communist states. Actually they did not take any legal action against the hijackers, and granted political asylum. This tendency made it difficult to have universal agreement about extradition.⁷⁹ According to U.S. Department of Transportation there have been 29 such incident between 1977 and 1988.⁸⁰

II-5-3. Criminal Extortionist and Escapee

This category includes people who dream of making a big fortune at one stroke and thus could be identified as criminal sky looters. All aviation terrorists, actually, are criminals by both moral definition and the laws of every State. Whatever their motives, they are committing a crime when they commit an act against civil aviation. But a large number of hijackers in this category are people who have already had a previous conviction. A considerable number of the hijackers of United States registered aircraft to Cuba were criminals, suspects fleeing from the law, or people who had extorted ransom. Among these are individuals who, because of their mental condition, have been stimulated to attempt aircraft hijacking after hearing about a hijacking or after seeing films of aircraft hijackings or bombings. For example, when D. B. Cooper parachuted from a hijacked Northwest Airlines' aircraft with \$200,000 extortion money in

⁷⁹ Paul Wilkinson, *Terrorism and the Liberal State*, op.cit, P. 245

⁸⁰ U.S. Department of Transportation, FAA, Criminal Acts against Civil Aviation: 1986, PP, 17-26 and 1988, PP. 21-25

November 1971, the media coverage of the event was sensationalised and given prominence out of all proportion to the act. A song written about this incident became popular in Washington, and T-shirts and bumper stickers were marketed within seventy-two hours of Cooper's jump.⁸¹ In seven months five others imitated D. B. Cooper.⁸² From 1967 to 1972 there were 167 aircraft hijackings to Cuba, well over 50 per cent of them from the United States.⁸³ The Cuban authorities granted asylum to the incoming hijackers, with some exceptions at first. But since a large number of these hijackers were actually criminals who had extorted ransom money, the Cuban authorities began to treat the unwelcome criminal extortionists and escapees from the law harshly.⁸⁴ Since the adoption of the U.S.-Cuba Hijack Pact⁸⁵ in 1973, aircraft hijacking between the two states has drastically decreased.

Besides aircraft hijackings to other states there were hijackings that took place entirely within the national boundaries of the United States. These hijackings were generally carried out for money extortion. On June 4, 1970,

81 Grant Wardlaw, Political Terrorism: Theory, Tactics, and Counter-Terrorism, Cambridge: Cambridge University Press, 1989, P. 78; See also, Edward F. Mickolus, Transnational Terrorism, op.cit, PP. 287-288

82 David Phillips, Skyjack: The Story of Air Piracy, London: George G. Harrap and Company Ltd, 1973, P. 184

83 U.S. Department of Transportation, U.S. and Foreign Registered Aircraft hijackings: Updated: January 1, 1986, F.A.A. Office of Civil Aviation Security

84 Paul Wilkinson, Terrorism and Liberal State, op.cit, P. 246; Richard Clutterbuck, Living with Terrorism, op.cit, P. 97

85 On February 15, 1973, the United States and Cuba signed a memorandum of agreement regarding the return of hijackers of ships and aircrafts, which was to be in force for five years. Upon Cuban Premier Castro's denunciation of the agreement on October 15, 1976, the treaty became nullified on April 15, 1977. See, Edward F. Mickolus, Transnational Terrorism, op.cit, P. 374

TWA B-727 was hijacked on a domestic flight and \$100 million ransom was demanded. The attempt was foiled and the hijacker was captured.⁸⁶ It is very fortunate that aircraft hijacking by this type of person is not a great problem any more. There were only 3 aircraft hijackings for extortion during the last decade.

II-6. Conclusion

In this Chapter, it has been noted that acts of violence involving civil aviation are not a new phenomenon. The high profile and vulnerability of air transportation makes airlines a target for the hijacker or saboteur's bomb, actions promoted by terrorism or other motives. The incidence of aviation terrorism is not high in a statistical sense, either when looking at civil aviation history as a whole or at the millions of flights now operated annually. Any actual or attempted aircraft hijacking and other forms of attacks, however, threatens safety in an international transportation system where safety is paramount. This has led the civil aviation industry and governments to make efforts to tackle this problem. To foster a better understanding of what has been done and what remains to be done in combatting acts of violence against air transportation, the following Chapter will examine a regional variations of aviation terrorism and problems of aviation security.

⁸⁶ Ibid, PP. 182-184

CHAPTER III

AVIATION TERRORISM: REGIONAL VARIATIONS AND RESPONSES

"No airport security measures can be 100 per cent effective. Terrorists always find ways around them. They know how to exploit human reluctance to employ rigorous security measures; they can find sympathizers who will smuggle arms on board airplanes before take off; and they will find countries where their activities are not only tolerated but also praised."¹

"Governments of certain of the major aviation powers have recognized the potential danger emanating from points in Africa and Asia as can be seen by their developing co-operative aid programmes designed to improve security at such locations. Such governments are acting to integrate security programmes of the airports into which their registered aircraft fly with the major centres on the national carrier's network. It is a good example of international co-operation. They must be very careful however not to overlook the security needs of their own airports. It does happen."²

III-1. Introduction

Following from previous Chapter's analysis of the nature and general development of acts of violence against civil aviation, this Chapter deals with the variations of attacks on civil aviation by geographical region. It also focuses on the major problems of aviation terrorism which are now being faced by the international community under the current system. With the success of aviation security measures in the West, terrorists have directed their efforts toward

¹ Terrorism: The need for global action, The Observer: World Press for Schools, November 1985, P. 6

² Rodney Wallis, "Aviation Security", Paper for Discussion at St. Andrews' University, October 10, 1991, P. 20

alternative spheres of operation. As a result, the Third World states' airlines have been exposed to frequent attacks in recent years, though the airlines in Western states still remain a vulnerable target. The following Table III-1. illustrates this trend.³

Table III-1.

**Aircraft Hijackings By Geographical Locations
(1985-1990)**

	1986	1987	1988	1989	1990	Total
Western Europe	1	2	0	1	0	4
North America	1	1	0	0	3	5
Middle East	3	2	2	1	1	9
Eastern Europe	2	2	2	5	27	38
Latin America	1	1	4	2	5	13
Asia	1	1	4	3	4	13
Africa	0	0	1	2	3	6
Total	9	9	13	14	43	110

III-2. Aviation terrorism in the USA

With the most comprehensive aviation network in the world, the United States has been the principal victim of aviation terrorism since 1961, when the first U.S. aircraft was hijacked. In fact, more than 40 per cent of the acts of violence against civil aviation around the world have involved American aircraft. When recognition of the threat of aviation terrorism first arose in 1968, the United States started to develop extensive measures to prevent aircraft hijacking and other attacks against air transportation. These measures involved

³ Data are drawn from U.S. Department of Transportation, FAA, Criminal Acts Against Civil Aviation: 1990

the FAA, FBI and local law enforcement authorities working in close cooperation with the airline operators. However, the U.S. still suffers from the threat to the safety of civil aviation.

Analysis of attacks against U.S. airlines going back three decades and covering the years during which the hijacking of aircraft in the United States has been a serious threat, has identified the major cause. In more than 60 per cent of aircraft hijackings since 1961, the hijackers have made going to Cuba their goal. Most of the hijackers have been refugees from Cuba seeking to return. To understand the problems of attacks against civil aviation within the United States, it is important to look at the situation of such attacks in Cuba.

III-2-1. The Early Years

There is always greater probability of aircraft hijackings whenever there are internal armed clashes and extreme political changes within a state. During 1958 and 1959, the final stage of Fidel Castro's revolution against Fulgencio Batista Zaldivar's dictatorship, the revolutionary forces made use of aircraft hijacking as one of their tactics. In that year, they were responsible for four hijacking attempts against Cubana Airlines.⁴ The first of these incidents occurred on April 9, 1958, when Castro's rebel forces hijacked a Cubana aeroplane, flying on an internal flight from Havana to Santa Clara, Cuba, to Mexico.⁵ Another incident

⁴ US Department of Transportation, Aircraft Hijackings and other Criminal Acts Against Civil Aviation Statistical and Narrative Reports (hereafter Narrative Reports), Section D US and Foreign Registered Aircraft Hijackings, Updated to January 1, 1986, Washington D.C.: FAA, May 1986

⁵ Edward F. Mickolus, Transnational Terrorism: A Chronology of Events, 1968-1979, London: Aldwych Press, 1980, P. 42

occurred two weeks before Cuba's presidential elections on October 22, 1958, when Castro's Column 6 hijacked a Cubana airlines DC-10, flying from Cayo Mambi to Moa Bay, and forced it to land at their camouflaged airstrip.⁶ Similarly after Fidel Castro's takeover of the government of Cuba, there were 13 hijacks from 1959 to 1961 involving Cubans fleeing from Cuba to the United States.⁷ During this period, most of the final destinations of the hijackers were the United States and the hijackers usually were welcomed and granted political asylum by the U.S. government. One of the best example of these particular incidents occurred on October 29, 1960, when a Cubana DC-3, flying from Havana to the Isle of Pines, was hijacked by nine men who diverted it to Key West. A Cuban guard on board resisted, and a gunfight broke out in which he was killed and the pilot, copilot, and two passengers were wounded. The copilot who landed the aircraft was in league with the hijackers. The hijackers were greeted as heroes by anti-Castro Cuban exiles and hailed by the American press as oppressed people who had escaped to freedom.⁸ This factor might have encouraged the hijackings from Cuba to the United States at an early stage. One writer criticised this tendency in the following terms:

"... In particular, in the period 1959-60, we(America) repeated this error in connection with skyjackers who fled from Cuba to Miami. The original errors were probably made by army men who were much influenced by the whole phenomenon of men breaking through the iron curtain. They undoubtedly could not foresee the possibilities in the situation or have any knowledge of the history of piracy."⁹

⁶ Narrative Report, op.cit, P. 45

⁷ Ibid

⁸ Edward F. Micklous, op.cit, P. 50

⁹ David G. Hubbard, The Skyjacker: His Flights of Fantasy, New York: Collier Books, 1973, P. 228

This situation was overshadowed by the subsequent and more notorious reverse flow of hijacks from the United States to Cuba. The following Table III-2 illustrates a general development of US aircraft hijackings.¹⁰

Table III-2

**U.S. Registered Aircraft Hijackings
(1961-1990)**

Year	Total No. of US Aircraft Hijackings	No. of Successful Aircraft Hijackings to Cuba	No. of Unsuccessful Aircraft Hijackings to Cuba
1961	5	3	1
1962	1	1	0
1963	0	0	0
1964	1	1	0
1965	4	0	2
1966	0	0	0
1967	1	1	0
1968	22	18	1
1969	40	31	6
1970	27	14	1
1971	27	10	5
1972	31	6	1
1973	2	0	0
1974	7	1	0
1975	12	0	1
1976	4	0	0
1977	6	0	1
1978	13	0	3
1979	13	2	4
1980	22	13	4
1981	8	1	2
1982	10	3	2
1983	19	14	0
1984	7	3	0
1985	5	1	0
1986	4	0	0
1987	4	2	0
1988	2	1	0
1989	2	1	0
1990	4	1	0
Total	300	126	36

¹⁰ Narrative Reports, op.cit

The first aircraft hijacking originating within the United States occurred on May 1, 1961, when Antulio Ramirez Ortiz, who used the name of Elpirata Cofrisi, spelling out the name of an eighteenth-century Spanish pirate, hijacked National Airlines flight 337, flying from Marathon in the Florida Keys to Key West, and forced it to fly to Havana. The hijacker was arrested by Cuban soldiers, and the aircraft and passengers were briefly detained and then released. On November 11, 1975, Ramirez was arrested in Miami by FBI and sentenced to twenty years for the first hijacking of a US aircraft.¹¹ This incident was followed by the hijacking of Eastern Airlines flight 202, flying from Miami to Tampa, on July 24, 1961.¹² These initial incidents engendered grave anxiety about the future trend of events. The anxiety became more intense when Castro held the hijacked aircraft in retribution for the impoundment of several Cuban aircraft previously hijacked to the United States. The latter were held under claims brought against the Castro government by private businesses holding pre-revolutionary assets in Cuba. The great concern over aviation terrorism developing within the United States was well founded. After an initial peak in 1961, an epidemic wave of aviation terrorism started in 1968. A total of 35 aircraft hijackings took place world-wide in that year, and more than 40 per cent of aircraft hijackings occurred within the United States. Cuba was the final destination of 12 hijacking incidents. The worst year in aviation history was 1969. In that year, 85 hijacking attempts were recorded world-wide, including 40 attempts against US aircraft. Cuba still remained the preferred destination of hijackers. Thirty-one US registered aircraft were flown to Cuba during that year. Between 1970 and 1972, 76 US registered aircraft hijackings occurred. During

¹¹ Edward F. Mickolus, *op.cit*, PP. 51-52

¹² *Ibid*, P. 52

this period, a new tactic was introduced. In November 1971, D.C. Cooper hijacked a Northwest Airlines aircraft and demanded extortion money. The hijacker parachuted from the aircraft and disappeared with \$200,000 extortion money.¹³ This incident spawned similar parachute extortion attempts. There were more than 10 such attempts from December 1971 to December 1972.¹⁴

A guise of political terrorism was adopted in the United States in several hijacking attempts by self-identified members of the Black Panther Organization. For instance, on June 3, 1972, a male and a female hijacked a Western Airlines aircraft, flying from Los Angeles to Seattle. The hijackers demanded \$500,000 and flew to Algiers, where they asked for asylum. Nearly two months later, on July 31, 1972, five hijackers claiming to be Black Panther party sympathizers took over a Delta Airlines aircraft, flying from Detroit to Miami. They demanded \$1 million and flew to Algiers, where they were taken into custody but freed later.¹⁵

In late 1972, there were two significant aviation terrorism incidents which had a great impact on the decision by the US government to implement total screening for all passengers and cabin luggage. On October 29, four armed men, who were charged with the murder of policeman during an attempted bank robbery on October 25, 1972, hijacked an Eastern Airlines aircraft on the ground at Houston airport and forced the pilot to fly to Havana. The hijackers killed a ticket agent and wounded a maintenance man when they forced their way into the aircraft.¹⁶ On November 10, 1972, a Southern Airways aircraft,

¹³ Edward F. Mickolus, *op.cit.*, PP. 287-288

¹⁴ *Ibid*, PP. 293, 295, 296, 297-298, 307-308, 313, 325, 328-329 and 330-332

¹⁵ *Ibid*, 334

¹⁶ Keesing's Contemporary Archives, April 9-15, 1973, P. 25827

flying from Birmingham to Montgomery, Alabama, was hijacked by three wanted criminals who forced the pilot to fly to nine different locations in three states before finally landing in Cuba. During the hijacking crisis, the hijackers demanded \$10 million, ten parachutes, and stimulants to keep the four crewmen alert. To show their determination, the hijackers forced the pilot to fly to Toronto, and threatened to crash the aircraft into the Oak Ridge atomic facility if their demands were not met. The aircraft landed several times to refuel at different places. At Orlando, the FBI shot out the tyres of the aircraft. In retaliation, the hijackers shot the copilot and forced the pilot to circle over Key Biscayne where they unsuccessfully demanded to talk by radio to President Nixon who was relaxing after his re-election victory. After an ordeal of 26 hours, the hijackers finally ordered the pilot to return to Cuba for the second time and released the hostages.¹⁷

After these serious hijacking incidents, both the Cuban and US governments issued statements on November 15, 1972, expressing their desire to negotiate an agreement to curb aircraft hijackings, and proposing that negotiations to this end should be conducted through the Swiss government. The Cuban statement called for a broad agreement with the United States covering not only aerial hijackings but also all forms of violence affecting the two states. In its declaration the Cuban government stressed that it had absolutely no wish, nor did it desire in any way, that Cuban territory should be used as a refuge by persons responsible for common criminal acts that might occur in any part of US territory.¹⁸ The Cuban government reiterated on November 17 its desire for immediate

¹⁷ Ibid, PP. 25827-25828

¹⁸ Ibid, P. 25828

negotiations with the United States on anti-hijacking measures. On November 20, the State Department announced that the Cuban government had accepted formal proposals for negotiations, and that Cuba and the United States had agreed in principle that the proposed agreement should cover hijackings of aircraft as well as of ships.¹⁹ As a result of the negotiations, an agreement (officially a "memorandum of understanding") between them on the prevention of hijacking, both aerial and maritime, was signed by the United States and Cuba, on February 15, 1973. The agreement provided for the punishment of persons seizing airliners or vessels of either state with the intention of finding sanctuary in the other.²⁰ The Article 1 states as follows:

"Any person who hereafter seizes, removes, appropriates or diverts from its normal route or activities an aircraft or vessel registered under the laws of one of the parties and brings it to the territory of the other party shall be considered to have committed an offence and therefore shall either be returned to the party of registry of the aircraft or vessel, to be tried by the courts of that party in conformity with its laws, or be brought before the courts of the party whose territory he reached for trial in conformity with its laws for the offence punishable by the most severe penalty according to the circumstances and seriousness of the acts to which this article refers."²¹

At the same time, the agreement provided for the consideration of the political defense but made no exception for acts of extortion or violence committed by a hijacker in the course of a political offence. Article 4 states as follows:

"The party in whose territory the perpetrators of the acts described in Article (1) arrive may take into consideration any extenuating or mitigating circumstances in those cases in which the persons responsible for the acts were being sought for strictly political reasons..."²²

¹⁹ Ibid

²⁰ U.S. Department of State Bulletin, March 5, 1973, P. 261

²¹ Keesing's Contemporary Archives, April 9-15, 1973, P. 25828

²² Ibid

The effectiveness of the agreement as a means of controlling aircraft hijacking soon became apparent. Only one U.S. aircraft was hijacked to Cuba between 1973 and 1976. Although the agreement failed to affect offences committed prior to its conclusion, 11 hijackers whose offences were committed from 1961 to 1973 were returned to the United States from Cuba, directly or indirectly.²³ The agreement was renounced by Fidel Castro on October 15 1976, effective from April 15, 1977, on the grounds of alleged U.S. complicity in the sabotage of a Cuban aircraft.²⁴ However, Castro subsequently indicated that he would continue to cooperate with the U.S. on matters relating to aircraft hijacking. For the first time ever, Cuba on September 18 1980, handed over to the United States two men who had the previous day hijacked to Cuba a Delta Airlines B-727 with 114 people on board. Although the 1973 U.S.-Cuba anti-hijacking agreement had been unilaterally abrogated by Cuba in 1977, the Cuban government warned on September 16, 1980 that henceforth anyone hijacking to Cuba would receive a heavy prison sentence or would be handed over to the United States.²⁵ At the same time, the U.S. government wanted to renew the agreement between two states, mainly because Cuba is the major destination for American hijackers. This illustrates the potential utility of such an agreement as a deterrent to aircraft hijacking.

Meanwhile, the US government received a surge of criticism from Congress, the press and the US Air Lines Pilots Association (ALPA) after the incidents,

²³ Alona E. Evans, "Aircraft and Aviation Facilities", in Alona E. Evans and John F. Murphy, Legal Aspects of International Terrorism, Lexington: Lexington Books, 1978, P. 26

²⁴ Keesing's Contemporary Archives, January 7, 1977, P. 28132

²⁵ Keesing's Contemporary Archives, December 5, 1980, P. 30610

and announced new security requirements, to be effective in thirty days, on December 5, 1972. Airport operators were directed to station armed law enforcement officers at passenger check points, search all carry-on items, and screen all passengers with electronic devices as a condition to boarding.²⁶ These developments produced a precipitous drop in the hijacking of US passenger aircraft. There were 26 such incidents in 1972, but only 2 in 1973 and 3 in 1974.

Not all of the aircraft hijackings in the United States have been initiated by criminals, persons wishing to return to Cuba, or by mentally unbalanced individuals. On September 10, 1976, a TWA B-727 aircraft, flying from New York to Chicago with eighty-six passengers and seven crew members, was hijacked by six Croatian nationalists. The hijackers boarded at La Guardia and claimed to have had gelignite bombs with them on board the aircraft. The hijackers threatened to blow up the aircraft if their demands to publicize the declaration: "Free Croatia" and disburse leaflets over major cities in the United States and abroad were not met. The hijackers had also planted a bomb, which exploded while a bomb expert was trying to remove it, in a locker at Grand Central Station in New York, to make their demands more credible. The hijacked aircraft flew to Canada and then to Gander, Newfoundland, where the hijackers released 33 passengers and proceeded to Iceland for refuelling. The hijacked aircraft, escorted by an TWA B-707, took off for London where the 707 dropped propaganda leaflets over the city. More propaganda leaflets, given by the hijackers to the freed passengers, were dropped from a helicopter over Montreal. TWA B-707 also dropped leaflets over Paris before landing with the

²⁶ Department of Transportation News, Office of the Secretary Press Release, December 5, 1972

B-727 at Charles de Gaulle Airport. The hijackers surrendered and returned to New York to face murder and air piracy charges.²⁷

III-2-2. The Current Picture

With the increased threat of hijacking, 100 per cent screening of passengers and their carry-on luggage was introduced in the United States early in 1973. Since then such attacks have fallen below the rates of the 1969-1972 years, although there were 11 in 1980 and 17 incidents in 1983. From 1980 to 1983, there were 54 aircraft hijackings. This upturn in aircraft hijackings in the United States resulted as an after-effect of massive influx of Cuban refugees to the United States from the Cuban port of Mariel in 1980.²⁸ From April to June 1980, it was reported that 114,475 Cubans had arrived in the United States by boat, joining some 500,000 Cubans already in Florida and 25,000 other refugees.²⁹ Since then more than 50 per cent have had Cuba as a final destination. In the space of one week in August 1980 six US aircraft were hijacked to Havana by Cuban refugees who were discontented with life in the United States. In the first incident an Air Florida B-737 aircraft, on a flight from Miami to Key West was hijacked by a man, who threatened the pilot with a bar of soap disguised as a bomb; the aircraft then proceeded to Havana where the

²⁷ Edward F. Mickolus, *op.cit.*, PP. 644-646

²⁸ Air Transport Report, "U.S. Hijackings: The Major Cause and Cure", October, 1983, P. 1

²⁹ Keesing's Contemporary Archives, September 19, 1980, PP. 30474-30475

hijacker surrendered to Cuban officials.³⁰ Three days later, another Air Florida aircraft on the same route with 74 people on board was hijacked by seven Cubans who, by threatening to ignite a jar of petrol forced the pilot to fly to Havana where the hijackers were taken into custody by the Cuban authorities.³¹ A day later, on August 14, a National Airlines Aircraft, flying from Miami to San Juan, Puerto Rico, was hijacked by two Cubans to Havana.³² Despite increased security measures, on August 16, three US aircraft of Eastern Airlines, Republic Airlines and Delta Airlines, were hijacked to Havana by Cubans. In all these incidents the hijackers made their demands by using threatening gestures which suggested that they possessed inflammable liquids.³³

In response to the increase in aircraft hijackings by Cuban refugees, airlines introduced some extraordinary security measures in cooperation with the FAA. The measures included the use of an FAA behavioural profile to spot potential hijackers, special processing for passengers meeting the profile, and upgrading of screening equipment where needed.³⁴ The Federal Aviation Administration also announced the use of armed sky marshals on selected flights.³⁵ In addition, the FAA added scrutiny for flammables. In fact, hijacking by Cuban refugees as a means of returning to Cuba occurred at a time when improved weapon

³⁰ U.S. Department of Transportation, FAA, Worldwide Significant Criminals Acts Involving Civil Aviation: January-December 1980, P. 13

³¹ Ibid

³² Ibid, P. 14

³³ Ibid

³⁴ Air Transport Report, op.cit, P. 5

³⁵ Keesing's Contemporary Archives, September 19, 1980, P. 30475

detectors were being used on boarding passengers and state-of-the-art X-ray machines for carry-on luggage were detecting with increasing accuracy virtually all attempts to smuggle hand-guns or other weaponry aboard aircraft.³⁶ This gave rise to the use of containers of flammable or allegedly flammable liquids by Cuban refugee hijackers.³⁷

Aircraft hijackings to Cuba in early 80s were a symptom of the Cuban refugee problem. The Cuban refugee problem caused a costly impact in many other areas, ranging from welfare and housing costs to crime control. However, hijackings to Cuba were the most dramatic and visible symptoms of the refugee problem. The Cuban refugees departed without documentation and with no right to return. Some of them regarded hijacking as the only way of returning to their state. This group was encouraged by the previous successful hijackings.

Within the United States, the total number of aircraft hijacking and other forms of attacks against civil aviation has diminished and remained low since 1983. In 1989, only two aircraft hijackings occurred. However, it is unlikely that such attacks will cease altogether. This was demonstrated by the slight increase of hijacking incidents in 1990.

III-2-3. The U.S. Responses

As acts of violence against civil aviation emerged as a serious threat, the United States has developed a comprehensive strategy for dealing with this problem. In the international sphere, the U.S. government has taken an active

³⁶ Air Transport Report, op.cit, P. 2

³⁷ Keesing's Contemporary Archives, September 19, 1980, P. 30475

role in many multilateral efforts to combat aviation terrorism. In fact, the United States has joined other states attempting to develop international norms through the United Nations. At the same time, the United States has also endeavoured to remove underlying grievances in certain areas of concentrated terrorist activity. For example, the U.S. administration have participated actively in negotiations designed to resolve territorial disputes in the Middle East. Despite these various efforts, the U.S. government has been largely unable to halt terrorist attacks against civil aviation through international agreement.³⁸

This lack of success in the international sphere has promoted the U.S. authorities to resort to the development of various kinds of security and policy measures to prevent acts of violence against civil aviation. At the early stage in the war against aviation terrorism, the U.S. government hoped that aircraft hijacking could be stopped by legal measures. It accepted the airlines' contention that passengers should not be alarmed or inconvenienced by highly visible security measures. In fact, there were only 9 aircraft hijackings between 1961 and 1967. Thus, the U.S. government seemed to have largely ignored the possibility of aircraft hijacking on a large scale on the pretext of travelling public's convenience. However, since the increased threat of aircraft hijacking which arose in the United States in 1968, the U.S. government have been on the leading edge of aviation security activities. The government has pioneered the development of technical measures to prevent acts of violence against its airlines by working in close cooperation with airlines and airport operators. The result is an aviation security programme which has become the model for much of the rest of the world.

³⁸ Note, "Export Controls And The U.S. Effort To Combat International Terrorism", Law and Policy In International Business, Vol. 13, 1981, PP. 521-522

One of the achievements at the early stage was introduction of the profile system. As a result of the tremendous increase in hijacking attempts during 1968, the FAA established a task force in October of that year to consider a unified method of dealing with the problem of hijacking. Initial efforts were devoted to a study of the embarkation points and destination of the hijacked aircraft to determine whether these might reveal any pattern. In addition, Dr. E. W. Pickrel, an FAA psychologist, examined the backgrounds and behavioural characteristics of those who had carried out or attempted to carry out hijackings to see if they exhibited a discernible behavioural pattern. The result of this effort was the "passenger profile" system which was designed to identify potential hijackers through observation and interrogation prior to boarding their aircraft.³⁹ This programme initially received a mixed reaction from aviation industry. Airlines that had suffered from such attacks recognized the necessity for preventive measures and were ready to cooperate. However, airlines that had not been affected were less enthusiastic. One writer described the reason for this negative attitude in the following terms:

"They felt that the introduction of such a program would have an adverse effect on travellers. It would negate the image that the airlines had sought to build up of air travel as a completely safe, pleasurable experience".⁴⁰

The reaction of passengers, however, was largely positive. The majority of passengers overlooked whatever inconvenience resulted from the programme, simply because they recognized that surveillance was for their safety. At the same time, the effectiveness of the profile system has been proved over the last

³⁹ William A. Crenshaw, Terrorism and the Threat to the Civil Aviation, Ph.D. Dissertation, University of Miami, May 1978, PP. 85-86

⁴⁰ Michael J. Fenello, "Technical Prevention of Air Piracy", in Narinder Aggarwala, et al(ed), "Air Hijacking An International Perspective", International Conciliation, No. 585, November 1971

two decades in the United States. By 1973, it was determined that 95.5 per cent of air passengers would be cleared as not being potential hijackers. Consequently, it is easy to identify the remaining 4.5 per cent of passengers for closer scrutiny. When combined with these and other security measures such as total screening of passengers, the passenger profile system has produced good results in low risk situations.

In spite of success, it is difficult to see that this particular system is a successful method when it is applied to politically motivated terrorists. The vast majority of attacks against U.S. civil aviation have been committed by simple refuge seekers and mentally unbalanced individuals. The passenger profile system was originally designed to prevent the specific problem of hijackings by Cuban refugees whose main aim was not political. This profile system was easy to apply and required no special training for security staff whose role was merely to detect potential hijackers to Cuba. However, this system exhibited deficiencies in the detection of politically motivated and highly trained terrorists. The writer's former colleague, Dr. Robin E Hill made the following observation:

"The easily identifiable form of threat being faced by airports along the eastern seaboard of the United States at that time allowed profiling to take the form of simple questions and observations aimed at finding hijackers whose principal objective was not political and so were unable to be classified within the parameters of terrorism".⁴¹

With the recognition of this problem, the FAA with FBI assistance researched the possibility of developing new profiles that could be applied to sophisticated terrorists. As a result of this effort, terrorist profiles for use in high threat areas were produced. It was reported that the results of these new profiles were

⁴¹ Robin E. Hill, Problems of International Cooperation to Improve Standards of Aviation Security with Reference to the Passenger, Ph.D. Thesis, University of St. Andrews, November 1990, P. 112

promising, although the profiles are more complicated and require more infrastructure support, training, and a more highly skilled security staff.⁴²

In addition to the passenger profile programme, it was also announced in 1968 that the FAA would develop a team of specially trained flight inspectors who would be assigned to flights on a random basis.⁴³ It is very interesting to note that, in fact, the FAA deputized twenty of its Flight Standards Branch employees as U.S. marshals in 1962 and utilized them on board designated high-risk flights.⁴⁴ The U.S. government kept this first Sky Marshal program secret. This decision was consistent with the low-profile policy that governed the anti-hijacking program until 1968. Following the Dawsons Field hijacking incident in September, 1970, the U.S. Customs Service, following a presidential direction, hired 1,500 Sky Marshals for use on both domestic and international flights.⁴⁵ The Sky Marshal programme, which was terminated in 1972, was strongly opposed by the civil aviation industry and even many security experts expressed their worries concerning the introduction of such a practice for safety reasons. They argued that the use of armed sky marshals during the hijack situation in flight lead to "shoot-outs between guards and terrorists, with great danger to passengers from flying bullets and a near certainty that the outer fabric of the aircraft would be punctured, with all the risks of decompression and so

⁴² B. H. Vincent, "Statement before a Subcommittee of the Committee on Government Operations House of Representatives", September 25/26, 1989, P. 32

⁴³ U.S. House Committee on Foreign Affairs, Subcommittee on Inter-American Affairs, 90th Congress, 2nd Session, 1968, P. 5

⁴⁴ Robert G. Bell, "The U.S. Response to Terrorism Against International Civil Aviation", ORBIS, Vol. 19, No. 3-4, 1975, PP. 1330-1331

⁴⁵ The New York Times, September 12, 1970

on which that must entail."⁴⁶ Gayle Rivers, a counter-terrorist specialist described the worst situation which could arise as follows:

"If a terrorist in a plane is holding a grenade from which the pin has been removed(which he would usually do only if he intended to detonate it) and a gun in his other hand, even with my close-quarter combat training I'd have a real problem. I couldn't shoot him from a distance because his grenade hand would open, the lever would spring open automatically, and the grenade would go off."⁴⁷

It is highly controversial whether armed sky marshals on civilian aircraft contribute to the safety for the flying public or not. Although it cannot be denied that such a practice has acted as a deterrent, there are significant lessons to be learned from the Iraqi Air Flight 163 incident of 1986. During the hijacking situation, the terrorists were confronted by six undercover Iraqi armed security officers, a gun fight reportedly took place and at least two grenades were detonated, causing severe damage to the aircraft. The aircraft crashed while attempting an emergency landing in Saudi Arabia. As a result of the shooting, explosions, and the crash, 65 people were killed and more than 40 others were seriously injured.⁴⁸ In this case, the existence of sky marshals contributed to loss rather than the preservation of life. In this respect, some security experts argued that it would be infinitely safer to tighten up airport security to the point where potential hijackers could not get aboard aircraft. One writer even concluded that it is better to obey terrorists' instructions than risk an airborne

⁴⁶ Frank Brenchley, "Living with Terrorism: The Problems of Air Piracy", Conflict Studies, No. 184, P. 4

⁴⁷ Gayle Rivers, The War Against the Terrorists: How to Win It, New York: Charter Books, 1987, P. 64

⁴⁸ U.S. Department of Transportation, FAA, Criminal Acts against Civil Aviation: 1986, P. 44

gun-battle.⁴⁹ On the contrary, Israel's experience shows that such a practice can produce a good result. In fact, Israeli armed sky marshals have been largely successful and have contributed to a reduction in the number of attempted hijackings upon aircraft on which they are employed. Consequently, the employment of sky marshals should not be totally ruled out. However, it should be a last resort. In order to minimize the danger, this practice should be carefully applied in terms of the selection and training of sky marshals. Furthermore, special consideration should be given to the weapons of sky marshals. For example, it is known that El Al sky marshals carry small-calibre handguns armed with low-velocity cartridges to avoid bullets damaging the aircraft.

Meanwhile, once again, in 1980, the FAA introduced the Federal Air Marshal Programme(FAM), which created a force of highly trained aviation security professionals who work closely with the airlines and the flight crews. Following the TWA 847 hijacking crisis in June 1985, the International Security and Development Cooperation Act (Public Law 99-83), which established an explicit statutory basis for the FAM programme, was enacted. FAM's still continue to provide security coverage on selected flights operating in especially sensitive areas.⁵⁰

One of the most effective aviation security measures developed by the United States is the preboarding security programme of total screening of passengers and inspection of luggage which was instituted on January 5, 1973 under the

⁴⁹ Edgar O'Ballance, Terrorism in the 1980s, London: Arms and Armour, 1989, P. 117

⁵⁰ U.S. Department of Transportation, FAA, Semi-Annual Report to Congress on the Effectiveness of the Civil Aviation Security Program, July 1-December 31, 1986 and January 1, 1988-June 30, 1988

FAA Civil Aviation Security Program.⁵¹ The idea of the system was derived from the fact that the possibility of hijackers and their weapons getting aboard should be prevented at the boarding gate by 100 percent screening and searches. In fact, many previous incidents demonstrate that once a aircraft is airborne with terrorists on board, the aircraft and its passengers are isolated from effective counter-measures.⁵² The preboarding security system employed prior to 1973 which consisted of the application of a profile with selected screening of suspect passengers proved insufficient as a control measure to contain the increasing hijackings and the Sky Marshal program was broadly criticised. This program was expanded to a selective screening system for checked luggage, following the bomb explosion at La Guardia airport on December 29, 1975.⁵³ Initially, the proposal to undertake a total screening program was not generally supported by the American public, the airlines or the airports. In fact, when the programme was proposed, there were negative reactions from both the government and the aviation industry who said this could not be done. In a sense, such a reaction was understandable, given the millions of people, the luggage and the flights involved and, for U.S. society, the unprecedented nature of the personal inspections contemplated.⁵⁴ However, it has been proved that the security

⁵¹ U.S. Department of Transportation, FAA, Semi-Annual Report to Congress on the Effectiveness of the Civil Aviation Security Program, January-June 1976, PP. 10-11

⁵² Richard Clutterbuck, Living with Terrorism, London: Faber and Faber, 1975, PP. 117-118

⁵³ Time, January 12, 1976, PP. 20-23

⁵⁴ C.J. Nau Jr., "The Antiskjack System: A Matter of Search-or Seizure," Notre Dame Lawyer, Vol 48, 1973, P. 1261; Temple B. Ingram, Jr., "Are Airport Searches Still Reasonable?", Journal of Air Law and Commerce, Vol. 44, 1978, PP. 137-174; Edward McWhinney, Aerial Piracy and International Terrorism: The Illegal Diversion of Aircraft and International Law, Dordrecht:

system has worked remarkably well. Paul Wilkinson explained the reason for the success of this program as follows:

"The secret of making the checks acceptable to the travelling public was to ensure that adequate staff and machines were available to check passengers very rapidly, thus ensuring that any delays that occur happened at the check-in desk or through unavoidable technical, weather, or air traffic control holdups and not at security. The airports and airlines cooperated to make the new system work, initially because they had no other choice".⁵⁵

From 1973 to 1988, 9.5 billion persons were processed through Airport Security Screening systems and more than 10 billion pieces of carry-on luggage were inspected. This resulted in the detection of over 38,600 firearms and nearly 19,000 related arrests. The FAA estimated that 118 aircraft hijackings and related crimes may have been prevented.⁵⁶ The number of aircraft hijackings originating in the United States shows the effectiveness of the programme. In 1973, the year after its introduction, the total of U.S. aircraft hijackings dramatically dropped from 26 to 2. Richard Clutterbuck described the success of the programme thus: "It showed that 'impossible' problems could be overcome".⁵⁷

Since then hijackings have fallen below the rates of the 1969-1972 period, although there were 21 incidents in 1980 and 17 in 1983, largely an outgrowth of the Mariel boatlift that brought a massive number of Cuban refugees to the

Martinus Nijhoff Publishers, 1987, P. 83; Air Transport Association, "Protecting Air Transportation From Hijacking and Sabotage", October 1985, P. 7

⁵⁵ Paul Wilkinson, "Putting Lives First?: the problems of creating an effective international regime for aviation security", Inaugural Lecture, October 22, 1991, University of St. Andrews

⁵⁶ U.S. Department of Transportation, FAA, Semi-Annual Report to Congress on the Effectiveness of the Civil Aviation Security Program, January 1, 1988-June 30, 1988, P. 6

⁵⁷ Richard Clutterbuck, op.cit, P. 119

United States in 1980. Otherwise, the U.S. aircraft hijackings in the years from 1973 to the present have ranged from 2 in 1973 to a high of 11 in 1979. The original screening system worked relatively well in detecting handguns and knives. Hijackers then became more sophisticated and started to use small quantities of gasoline or explosives to hijack aircraft. This trend was seen within the United States in the early 1980s. In spite of the effective screening programme, aircraft hijacking and other forms of attack on civil aviation have continued in the United States. This indicates that terrorists still find ways to sneak firearms or explosives aboard aircraft. It is interesting to note that there have been considerably more than 100 U.S. registered aircraft hijackings since the introduction of the preboarding passenger screening programme. At the same time, FAA officials regularly evaluate its effectiveness by trying to smuggle mock weapons through airport security and on to the aircrafts. In 1987 20 per cent of the attempts to spirit make-believe bombs and other weapons on to aircraft succeeded.⁵⁸ This fact demonstrates that this security measure is not a total answer to preventing terrorist attacks against civil aviation.

In addition to the various security measures, the U.S. Congress implemented the Hague Convention by enacting the Anti-Hijacking Act of 1974. This law amended the Federal Aviation Act of 1958 by redefining the special jurisdiction of the United States and modifying the offence of aircraft hijacking to conform to the requirements of the Hague Convention. Aside from the criminal provisions of the act, it gives the President authority to suspend air services between the United States and any state which is acting in contravention of the Hague Convention. The Act also empowers the Secretary of Transportation to assess the security precautions maintained at airports of nations with whom the

⁵⁸ Michael Prince, Crash Course: The World of Air Safety, London: Grafton Books, 1990, P. 44

United States has a bilateral air transportation agreement or whose airlines have obtained a foreign air carrier permit from the United States. If the security measures at these respective airports are deemed by the Secretary to be inadequate, notice is to be given to the foreign authority. The Act further provides that the Secretary of Transportation, subject to the approval of the Secretary of State, may agree to withhold, revoke, or impose conditions on the operating authority of the airlines of any nation whose security measures are not improved after notice of inadequacy has been given to the foreign authority.⁵⁹ In the same year, the United States extended its extra-territorial powers still further under the U.S. Comprehensive Crime Control Act of 1984, which conferred on U.S. Courts in respect of terrorists, jurisdiction if either the offender is found in the United States, or the offender or a hostage is a U.S. Citizen, or the United States government is the object of the terrorists' attack. In addition, under the terms of the U.S. Foreign Assistance Act of 1985, the Secretary of Transportation is authorized to withhold or revoke the authorisation to operate in the United States of any foreign airline which fails to meet the minimum security standards.⁶⁰

⁵⁹ Alona E. Evans, "Aircraft and Aviation Facilities", in Alona E. Evans and John F. Murphy, Legal Aspects of International Terrorism, Massachusetts: Lexington Books, 1978, P. 13; Louis G. Fields, Jr., "Terrorism: Summary of Applicable U.S. and International Law", in Y. Alexander and Robert A. Kilmarx(ed), Political Terrorism and Business: The Threat and Response, New York: Praeger, 1979, PP. 162-163; Note, Export Controls and the U.S. Effort to Combat International Terrorism, op.cit, PP. 538-539

⁶⁰ Humphrey G. Dawson, "Civil Aviation, Hijackings and International Terrorism: An Historical and Legal Review", Paper for the Aeronautical Law Committee of the International Bar Association's Conference in New York, 1986, P, 27

The aviation security community, in the United States, have faced new challenges since the early 1980s. The nature of the threat to U.S. civil aviation changed from one of aircraft hijacking to a sophisticated sabotage bomb threat. Unfortunately, unlike its action in the early 1970s to protect against aircraft hijackings, the U.S. government did not acquire the development and implementation of a comprehensive civil aviation security system to protect against sabotage attacks in flight. According to aviation security experts, the current security system is not sufficient to prevent another Pan Am 103 tragedy.⁶¹ Issac Yeffet, former director of security for El Al, who inspected and appraised seven of the biggest and busiest airports in the United States in the wake of the Lockerbie disaster, described the problem of aviation security in the United States as follows:

"There is no airline security in the United States. What little is being done to protect passengers is not done well. The U.S. carriers are spending enough money, but they are not spending it on the right things. The carriers follow FAA regulations, but these aren't tough enough. Security pays for itself in decreased insurance fees and increased ridership, but airline executives have made security a low priority. There is no reason to believe this will change until there is a major disaster at an American airport".⁶²

According to the report of the Conde Nast Traveler News Unit, any kind of inspection of checked luggage was occasional and random on international flights. Security for U.S. domestic flights is even more lax than on international flights.⁶³ This reality was demonstrated and criticized by Yeffet:

⁶¹ Paul Wilkinson, "The Lessons of Lockerbie", Conflict Studies, No. 226, December 1989, PP. 5-6; Paul Wilkinson, "Terrorist Targets and Tactics: New Risks to World Order", Conflict Studies, No. 236, December 1990, PP. 12-13; Bille H. Vincent, Statement, op.cit, P. 27

⁶² "No Airport in the U.S. is Safe", Life, March 1989, P. 132

⁶³ Conde Nast Traveler News Unit, "Flight 103: What we must do next to eliminate risks", March 1989, P. 32

"It allows luggage to go directly to the belly of the plane without being X-rayed, without opening the bag, without making sure that the passenger will be on the plane too. A passenger wearing a T-shirt that says, Abu Nidal, the 15th of May Organization, as long as he has a ticket, can even have his luggage loaded beneath the cockpit uninspected... At La Guardia I was able to place my suitcase on the United Airlines Flight 67 to O'Hare without ever showing a ticket or getting on the plane. I took American Airlines to Chicago instead and picked up the bag. If Lockerbie tells us anything, it is that airlines must match luggage to passengers. If, for any reason, a piece gets on airplane without its owner, it should be taken off immediately no matter what the delay or inconvenience to passengers."⁶⁴

This problem is not limited to only one airport in the United States. Several other airports also have a similar problem. It may be unfair to make a comparison with the El Al security operation. United Airlines, TWA and American Airlines are 200 times bigger than El Al. Many experts agree that the El Al type of boarding process would be slowed to a level which would be unacceptable to both the civil aviation industry and the American public. However, the passive approach to air safety might stem from the fact that the U.S. airlines are too far removed from the front line of terrorism to be concerned. One of the FAA officials expressed his point of view which gives a shock to the current writer:

"Terrorists are not very common in the U.S. We do not have Abu Nidal running around the streets of New York or Detroit. We have a problem overseas, and that's where extraordinary(security) measures exist. If we were to have any indication from intelligence agencies that there is a domestic threat, we would make changes overnight".⁶⁵

This concept is very dangerous. Even if threat information is received, insufficient time may exist to develop an adequate security response given the current state of the civil aviation security system protecting U.S. air carriers. As

⁶⁴ "No Airport in the U.S. is Safe", op.cit, P. 132

⁶⁵ Ibid, P. 137

was demonstrated in the early 1980s, when a large number of American airlines were hijacked by Cubans, domestic airlines are still exposed to such attacks. At the same time, it is very important to note that terrorists are likely to start taking aim at softer targets. The United States must not make the mistake of staying one step behind the terrorists. To eradicate acts of violence against civil aviation, civil aviation authorities have to stay one step or even two steps ahead of the terrorists. Further specific evidence of serious lapses was provided by journalists in the U.S who easily penetrated security barriers that were supposedly tightened up after the Pan Am 103 incident. For example, at John F. Kennedy Airport, U.S. a television reporter and a camera-man spent 20 minutes inside the off-limits airside areas where cargo was being loaded before security staff picked them up.⁶⁶ These loose and uncontrolled systems should not be acceptable in the United States.

One of the fundamental problems in American aviation security is over reliance over technology. One writer describes this aspect as follows:

"...the American approach has been to rely heavily on technology, and because its many airports and heavy air traffic has been virtually untouched by the political terrorists, it has not concentrated on the human side of security."⁶⁷

The airlines invest millions on security equipments such as metal detectors and X-ray machines, but little on the people who operate it. It should be remembered that the modern technologies can only assist the security personnel, but they cannot make a judgements. Only highly trained security personnel can do that. The lack of required security training is the reality in the United States. One

⁶⁶ Conde Nast Traveler News Unit, op.cit, P. 29

⁶⁷ Peter St. John, Air Piracy, Airport Security, and Internation Terrorism, Westport, CT: Quorum Books, 1991, P. 107

writer criticised the inadequacy of the U.S. training program in comparison with Israeli rules on this subject as follows:

"Perhaps the most glaring deficiency in the current U.S. civil aviation security system is the lack of required security training. Only the security training for the flight crews and the Ground Security Coordinator's position is required to have specific hours of security training. Others involved in the security system, e.g., X-ray screeners, etc., are not required to have any specific amounts of training to perform a security function. Subject matter is also loosely defined, so loosely as to be totally ineffective. By contrast, the Israeli aviation security system invests four to five weeks in each individual involved in the application of their security system before allowing the individual to apply their security measures. Contrast this with the total absence of any required number of training hours, and the inadequate definition of the security subject matter, and you can get a sense of the real inadequacy of the U.S. security system. Two U.S. aircarriers operating in Europe, and now a third following the Pan Am 103 tragedy, have implemented portions of the Israeli security system. Regrettably, these airlines still only provide approximately eight to ten days of initial security training. Taken in its totality, the lack of required training, both in the number of hours and the subject matter, is the single most glaring deficiency in the U.S. civil aviation security system."⁶⁸

Under the current training program, it is certainly impossible to obtain security personnel who have been trained to an adequate standard. This was demonstrated by the conversation between a female security officer and a security expert:

"Explosives," she said.

"Do you know what Semtex, C-4, or PLX looks like?" I asked

"Not really," She replied honestly enough.⁶⁹

This may be exceptional. Unfortunately, this is the reality in civil aviation security. At American airports security personnel are there only to operate the

⁶⁸ Billie Vincent, Statement, op.cit, P. 30

⁶⁹ Antony Shepherd, "Europe's Airports: All Bark and No Bite", Stop Press, March 1989, P. 40

machine, but the responsibility is the machine's. In addition, the pay and employment conditions of security staff are very poor. This discourages high quality people from applying. Under the current employment conditions, most of the security officers in the United States are constantly looking for better employment elsewhere.⁷⁰ Americans place the security of aircraft in the hands of poorly trained, underpaid, unmotivated, overworked contract employees. It must be recognised that machines can never hope to keep a step ahead of terrorists. The only deterrent is capable, dedicated and knowledgeable people, who are proud of their jobs, and aware of their full responsibility.

The actual, and perceived failures of the civil aviation security system, in fact, invite additional attacks. As terrorists perceive that security systems are not adequate, they increase their focus of attention on the vulnerable aviation security system.

III-2-4. Closing Remarks

An extraordinary effort by the U.S. government has coped successfully with the threat of aviation terrorism, reducing the annual number of hijackings and sabotage attacks. At the same time, in designing efficient security measures for the safety of civil aviation, the experience of the United States provides a useful guideline for aviation security in the international community and its civil aviation industry. However, the government's response to terrorism has been a series of unrelated actions and enactments. Unfortunately, these lack a coordinated locus to prevent or deter terrorism. Although the tightening of airport security has reduced the threat of aviation terrorism, this security system

⁷⁰ Conde Nast Traveler News Unit, op.cit, P. 33

is not impregnable. Under the current system of aviation security, a concerted attack against U.S. airlines and airports by politically motivated terrorists would probably cause complete confusion and chaos. The success of the United States in preserving the security of civil aviation has been commendable, but it is not enough. At this point, the U.S.A. has to rethink the concept of airport security and re-evaluate its security system. The essential lesson of the U.S. experience in the war against aviation terrorism is that point defense of the latest target alone will not suffice. Unless the broad prospects of aviation terrorism are addressed, the U.S. government will remain one step behind the terrorists.

III-3. Middle Eastern Aviation Terrorism

It is generally accepted that the main source of the attacks against civil aviation has originated from the Middle East. Since the late 1960s, a significant portion of the attacks have been conducted by Palestinian groups. In addition, Shia fundamentalist groups have been identified as one of the main perpetrators in recent years. The most worrying factor concerning aviation terrorism rests not in its frequency, but in its other characteristics. Not only did the incidents carried out by Middle Eastern groups have the tendency to be more spectacular and more lethal, they were almost exclusively international rather than domestic. This combination has made them the source of considerable international friction. With the adoption of a political and diplomatic strategy by the PLO for the Palestinian cause, aircraft hijacking and other form of attacks against civil aviation have decreased since mid-1970s. The Palestinian hijack wave, however, has been followed by other Middle Eastern groups.

III-3-1. Palestinian Case

The advent of attacks by Middle Eastern terrorist groups on civil aviation is deeply related to the Arab-Israeli conflict. Over the last two decades, it has become evident that militant Palestinian movements are still playing a central role in the international terrorist community. The Palestinian terrorists are motivated by nationalism and their grievance is deeply rooted in history, arising from the settlement of those whom they regard as aliens in their state. They have a much more sophisticated organization than any of the other terrorist groups, using a world network of support to exert political blackmail and attract publicity for their cause. Before turning to the subject of Palestinian aviation terrorism, it is necessary to take a look at the continuous Arab-Israeli conflict over Palestine and to understand how this conflict developed, since the problems of Palestinian aviation terrorism can not be fully understood without knowledge of the early history of Palestine.

III-3-1-1. Historical Background

Historically, as the Arabs see it, the Israeli people have no real right to Palestine. They left in 70 A.D.⁷¹, and for eighteen and a half centuries there were very few of them there. The Arabs have been there since before 700 A.D. even though they lived under Turkish rule for about 500 years until 1918. It is worthless to argue about who has the real right to own Palestine, because it has been conquered repeatedly by the Romans 2,000 years ago, by the Arabs 1,300 years ago and by the Ottoman Turks 500 years ago. They, in turn, were driven

⁷¹ This date, like other date of biblical events, is approximate.

out by the Allied Armies in 1918. The Allies made ambiguous and conflicting promises, on the one hand to restore Arab rule, on the other hand to found in Palestine a national home for the Jews.⁷²

At the outbreak of World War I, Arab nationalists thought they had a choice of two courses of action: to cast their lot with the Turks in the hope of achieving autonomy and some self-government as an ultimate reward, or to support the Allies in the hope of acquiring complete independence. Once the Ottoman Empire joined the Central powers in the war, Britain saw the advantages of an Arab revolt. Not only would it weaken Turkey militarily by depriving her of Arab manpower, but Arab forces could be used to augment the Allied armies in the Near East.⁷³ When the Arabs cooperated with the British Army in driving out the Turks, they were promised, through Sir Henry McMahon and others, that after liberation they would be able to govern their lands in an area bounded on the north by a line from Mersin-Adana to the Persian frontier, on the east by Persia and the Persian Gulf, on the south by the Indian Ocean, and on the west by the Red and Mediterranean seas.⁷⁴ Meanwhile, on November 2, 1917, the British Government issued the Balfour Declaration, which was supported by

⁷² Henry Cattan, The Palestine Question, London: Croom Helm Ltd, 1988; Fred J. Khouri, The Arab-Israeli Dilemma, New York: Syracuse University Press, 1973; Hazem Zaki Nuseibeh, Palestine and the United Nations, London: Quartet Books Ltd, 1981, PP. 10-17; Bard E. O'Neill, Armed Struggle in Palestine: A Political-Military Analysis, Colorado: Westview Press, 1978, PP. 1-2; Henry Cattan, Palestine and International Law: The Legal Aspects of the Arab-Israeli Conflict, London: Longman Group Ltd, 1973, PP. 3-12; Abdallah Frangi, The PLO and Palestine, Translated by Paul Knight, London: Zed Books Ltd, 1983, PP. 1-28; Pamela Ann Smith, Palestine and the Palestinians, London: Croom Helm Ltd, 1984, PP. 7-37; Martin Gilbert, The Arab-Israeli Conflict: Its History in Maps, London: Weidenfield and Nicolson, 1974.

⁷³ Fred J. Khouri, *Ibid*, PP. 6-7

⁷⁴ Abdallah Frangi, The PLO and Palestine, London: Zed Books, 1983, P. 37

Lloyd George, Winston Churchill and others, enunciating Britain's support for the establishment of a "National Home" in Palestine for the Jewish people.⁷⁵ Britain's conflicting promises and policies ultimately led to strife between Arabs and Jews and to endless troubles in Palestine. At the San Remo Conference of April 25, 1920, the Victorious powers of World War I, acting as the Supreme Council of the League of Nations, decided to place Palestine in the British sphere of influence. On July 24, 1922, the League of Nations approved the final draft of the Palestine mandate and incorporated the Balfour Declaration into the document. It charged the mandatory power, Britain, with placing Palestine under such political, administrative and economic conditions as would secure the establishment of the Jewish "National Home"⁷⁶

During the Mandate, the British government did its best to control the flood of Jewish immigrants, initially from Russia and Eastern Europe. As anti-Semitism intensified in the social disorganization after the First World War and the Second World War saw a holocaust wrought by Nazi Germany in which six million Jews were put to death in the gas chambers of Eastern Europe, the remnants who survived clamoured to leave Europe and to come to a "National Home" in Palestine. This sudden surge of immigrants intensified pressures which triggered a revolt. The number of immigrants in 1933 was triple that of the preceding year. As a result of the massive increase in the numbers of Jewish

⁷⁵ Walter Laqueur and Barry Rubin(ed), The Israeli-Arab Readers: A Documentary History of the Middle East Conflict, London: Penguin Books, 1984, PP. 11-12; Chaim Herzog, The Arab-Israeli Wars: War and Peace in the Middle East, London: Arms and Armour Press, 1982, P. 11; Leonard Stein, Balfour, London: Vallentine Mitchell and Company, 1961

⁷⁶ Yonah Alexander, "From the Terrorism to War: The Anatomy of the Birth of Israel", in Yonah Alexander(ed), International Terrorism: National, Regional and Global Perspectives, New York: Praeger Publishers, 1970, P. 215

immigrants into Palestine, there were severe outbreaks of violence by the Arab community from 1935 to 1938.⁷⁷ Meanwhile, exposed and vulnerable in their isolated agricultural settlements and harassed by Arab terrorists, the Jewish settlers developed a defence organization, known as Haganah.

In 1945, after the British Government had rejected President Truman's call for the admission of 100'000 Jewish displaced persons from Europe to Palestine, the Jewish population in Palestine reacted with armed opposition to the Mandate authorities. The Irgun Zvai Leumi(IZL), an aggressive Jewish terrorist organization, demanded that the Jewish National Home should include not only all of Palestine, but also all that is now Jordan. When it was made clear that this was inconceivable, they launched a series of guerrilla attacks on the British Army.⁷⁸

By early 1947, the British Government realized that neither a negotiated settlement nor an equitable compromise could be found for the conflicting Arab and Jewish claims to Palestine. Unable to resolve the problem, and lacking the resources or determination to maintain the Mandate indefinitely by force, the British announced, on February 18, 1947, that they would turn over the Palestine problem to the newly formed United Nations.⁷⁹ On May 15, 1947, a

⁷⁷ John W. Amos, Palestinian Resistance: Organization of a Nationalist Movement, New York: Pergamon Press, 1980, P. 6; Edgar O'Ballance, Language of Violence: The Blood Politics of Terrorism, California: Presidio Press, 1979, P. 18; Hassan Bin Talal, Palestinian Self-Determination: A Study of the West Bank and Gaza Strip, London: Quater Books, 1981, P. 19; Richard Clutterbuck, op.cit, P. 77

⁷⁸ Richard Clutterbuck, op.cit, P. 77; Chaim Herzog, op.cit, 232; Edgar O'Ballance, op.cit, P. 19; George Rosie, The Directory of International Terrorism, Edinburgh: Mainstream Publishing Co., 1986, P. 138 and 149

⁷⁹ William B. Quandt, Fuad Jabber, Ann Mosely Lesch, The Politics of Palestinian Nationalism, California: University of California Press, 1973, P. 46

United Nations Special Committee on Palestine(UNSCOP) was established and in the ensuing months, UNSCOP examined several possible solutions and finally recommended the partition of Palestine into two states, one Jewish and one Arab, within economic union.⁸⁰ The partition of Palestine was opposed not only by the Palestinians, but also by the indigenous Orthodox Jews of Palestine who lived on good terms with their Arab neighbours.⁸¹ It soon became obvious that partition could not be accomplished peacefully, but would rather depend on the outcome of fighting between the Jews and the Arabs. Immediately after the UN General Assembly passed the partition resolution in November 29, 1947, there were repeated terrorists acts including the Deir Yassin massacre.⁸² As a result of the clashes, by the time the Mandate ended on May 15, 1948, nearly 200.000 Palestine Arabs had become refugees.⁸³

After the British withdrawal, a new dimension in the fighting was the intervention of a small number of regular army troops from surrounding Arab states, most notably Egypt and Trans-Jordan. In 1954, after President Nasser came to power in Egypt, Arab guerrillas intensified raids into the State of Israel, which was proclaimed by the Jews on May 14, 1948, on the eve of the termination of the British Mandate over Palestine. This led to the Americans,

⁸⁰ Ibid; T. G. Fraser, The Middle East, 1914-1979: Documents of Modern History, London: Edward Arnold, 1980, PP. 40-64; Yonah Alexander, op.cit, P. 236; Henry Cattán, The Palestine Question, op.cit, P. 33

⁸¹ Heney Cattán, Ibid, P. 34

⁸² Edgar O'Ballance, The Arab-Israeli Wars: 1948, New York: Praeger Publishers, 1957, P. 58; Yonah Alexander, op.cit, P. 58; Henry Cattán, Palestine and International Law, op.cit, P. 134

⁸³ Don Peretz, Israel and the Palestine Arabs, The Middle East Institute, 1958, P. 6; Benny Morris, The Birth of Palestinian Refugee Problem: 1947-1949, Cambridge: Cambridge University Press, 1987

British and French jointly deciding not to supply arms to Egypt unless these attacks were discontinued. Therefore, Nasser promptly signed an arms deal with Russia. The U.S. Government retaliated by reversing their decision to finance the Aswan Dam through the World Bank. On July 26, 1956, President Nasser thereupon announced the nationalization of the Suez Canal and this action, together with the Fedayeen raids, led to the Suez War in that year. The Israeli Army occupied the whole Sinai Peninsula including the Gaza Strip, from which they withdrew reluctantly under the promise that the United Nations Emergency Force would ensure freedom of passage through the Straits of Tiran.⁸⁴

After the Suez war, guerrilla attacks intensified, and from 1965 some incidents took place along the Jordanian-Israeli lines. The Israeli Government retaliated with raids into Jordan. The Syrians then began to attack agricultural settlements overlooked by the Golan Heights. In retaliation, Israel made air strikes against Syrian military targets and border villages. This Israeli air strike led the Arab states quickly to pledge their support to Syria, and the Egyptians moved a large army into the Sinai Desert, ordering the United Nations Emergency Forces to leave. On May 22, 1967, Nasser announced that the Straits of Tiran would be closed, thereby cutting off Israel's unique access to the Indian Ocean through the Gulf of Aqaba. This was the cause of the war. The Israelis attacked Egypt, Syria and Jordan in June and within six days Israel had taken

⁸⁴ Richard Clutterbuck, op.cit, P. 78; David Hirst, The Gun and Olive Branch: The Roots of Violence in the Middle East, London: Faber and Faber, 1977, P. 193; Ritchie Ovendale, The Origins of the Arab-Israeli Wars, London: Longman Group, 1984, P. 149; Jillian Becker, The PLO: The Rise and Fall of the Palestine Liberation Organization, London: George Weidenfeld and Nicolson, 1984, P. 35; See further reading about Suez War, Kennet Love, Suez, London: Mograw Hill, 1969; Hugh Thomas, The Suez Affair, London: George Weidenfeld and Nicolson, 1986; Mohamed H. Heikal, Cutting the Lion's Tail: Suez, London: Andre Deutsch, 1986; T. G. Fraser, op.cit, PP. 82-95

the whole Sinai Peninsula, West Bank, Gaza Strip, Golan Heights and the Old City of Jerusalem. The war was a total victory for Israel.⁸⁵

The defeat in the war with Israel accelerated the development of a Palestinian national movement free from the control of the Arab states. The immediate lesson of the defeat was that Israel could not be destroyed by conventional war undertaken by existing Arab regimes. Consequently, the Palestinian organisations came to the conclusion that they had to carry on the terrorist struggle outside Israel, thus initiating the era of international terrorism by the PFLP, which pioneered its use as a political weapon. The initial tactic of international terrorism was aircraft hijacking and holding passengers and crew members hostage in order to attain political aims.

III-3-1-2. Analysis of Palestinian Aviation Terrorism

Since the Arab defeat in the June 1967 war, international terrorism by Palestinians has had a fundamental impact on the international affairs. This has derived not so much from the proportion of acts carried out by Palestinians within the total framework of all international terrorist activities but from the innovative nature of the acts themselves. International terrorism against civil aviation is the most notable example. A campaign of aviation terrorism stemming from the Middle East has been characterised by a series of sporadic but spectacular incidents executed by mainly Palestinian terrorist organizations against the Israeli airline, El Al, as well as those of selected Western states. Aviation terrorism became a deliberate tactic following the Arab defeat in 1967

⁸⁵ Fred J. Khouri, *op.cit*, PP. 242-243; Jillian Becker, *op.cit*, P. 56; Ritchie Owendale, *op.cit*, P. 180; Charles W. Yost, "The Arab-Israeli War: How It Began", *Foreign Affairs*, January 1968, Vo. 46, No. 2, P. 305

war, to widen the conflict against Israel. What is important in the aviation terrorism campaign is the assumption that by striking boldly in the international arena, and by their linking their actions directly to specific political demands, Palestinians could call world attention to the Palestinian political problem. As George Habash observed:

"We think that killing one Jew far from the field of battle is more effective than killing a hundred Jews on the field of battle, because it attracts more attention."⁸⁶

This was demonstrated once again in explaining the PFLP's decision to attack an El Al aircraft at Zurich in 1969. Habash said that such attacks, even if repeated a thousand times, would not bring about the liberation of Palestine but the operation was justified in terms of the worldwide public attention for the Palestinian cause.⁸⁷ Besides seizing civil aircraft the terrorists have shot up El Al airliners at Western airports, planted bombs in El Al offices and even sabotaged aircraft in flight. The following Table III-3 illustrates the general development of aviation terrorism by the Palestinian terrorists.⁸⁸

⁸⁶ Claire Sterling, The Terror Network: The Secret War of International Terrorism, London: Weidenfeld and Nicolson, 1981, P. 114, cited from Oriana Fallaci, *Interviste con la Storia* Milan: Rizzoli, 1974

⁸⁷ Ariel Merari and Shlomi Elad, The International Dimension of Palestinian Terrorism, JCSS Study No. 6, P. 18, cited from Ha'aretz, March 2, 1969

⁸⁸ Data drawn from Ariel Merari and Shlomi Elad, The International Dimension of Palestinian Terrorism, Ibid, PP. 109-110

Table III-3

**Palestinian Aviation Terrorism
(1968-1984)**

Year	Arab Aircraft and Passenger Attack	Israeli Aircraft and Passenger Attack	Non-Israeli Aircraft and Passenger Attack	Total
1968	0	2	0	2
1969	0	2	2	4
1970	0	3	7	10
1971	6	2	0	8
1972	1	1	3	5
1973	0	4	4	8
1974	0	0	5	5
1975	1	2	0	3
1976	0	2	2	4
1977	1	0	1	2
1978	0	1	0	1
1979	0	1	0	1
1980	0	1	0	1
1981	0	0	0	0
1982	0	0	0	0
1983	1	0	0	1
1984	0	0	0	0
Total	10	21	24	55

To begin with aircraft hijacking was the speciality of the Popular Front for the Liberation of Palestine (PFLP), led by George Habash. Within the context of employing the strategy of international terrorism, the PFLP defined its enemy very carefully. The enemy includes not only Israel, but also the Zionist movement, world imperialism led by the United States and Arab reactionary tendencies represented by feudalism and capitalism.⁸⁹ This definition of the enemy provided the practical legitimization for international terrorism. Habash had not picked on aircraft hijacking simply as a grandiose means of publicizing his group and the Palestinian problem. He saw it as an opportunity to deal

⁸⁹ Popular Front for the Liberation of Palestine, A Strategy for the Liberation of Palestine, Beirut: P.F.L.P. Information Department, PP. 8-16

Israel's economy an effective blow. Israel, surrounded by Arab states, depended on El Al to maintain its link with friendly states. El Al was founded as one of the first acts of newly born State of Israel in 1948 when the Israel's population was a mere 600,000. By 1968 El Al had established itself as one of the largest international airlines, relative to the size of the state. But El Al was vulnerable because of the nature of its air routes. These were determined by the fact that Israel was hemmed in hostile Arab states, and this blockade cut her off from the international air traffic flows. To Habash, El Al was the symbol of Israel abroad, the flag-carrier which flaunted the permanence of a state the Arabs refused to recognize. In this view, El Al aircraft emerge as a preferred target as they belong to the enemy. At the same time, Western airports where El Al airliners operate also became legitimate targets. Habash hoped that he could reduce significantly the considerable contribution the airline made to Israel's income from tourism by aircraft hijacking, by shooting up El Al, by taking passengers hostage, by blowing them out of the sky, by attacking them in terminals, by deterring people from flying El Al and by deterring them from even visiting Israel at all.⁹⁰

The first act of aviation terrorism by the Palestinian terrorist organizations occurred in 1968. Until then this form of international terrorism had been largely limited to Cuba and the United States. On July 23, an El Al Boeing 707 was hijacked over the Mediterranean by armed Palestinian Arabs while on a scheduled flight from Rome to Tel Aviv. The hijackers attacked twenty minutes after take off, by threatening to blow up the plane with grenades and forcing it to land at Algiers' Dar Al-Bayda Airport. The 23 non-Israeli passengers were immediately released, but the 22 Israelis on board were detained by the Algerian

⁹⁰ David Phillips, Skyjack: The Story of Air Piracy, London: George G. Harrap, 1973, PP. 130-131 ff

Government.⁹¹ A statement was issued in Beirut the same day by the PFLP, claiming responsibility for hijacking the airliner.⁹² The Algerian Government had no advance knowledge of the hijacking, but it had no cause for surprise at being chosen as a haven. Algeria was one of the most vocal Arab states in denouncing Israel and she maintained that the Palestinian problem was one that could be solved only by armed struggle.⁹³ While Palestinian terrorists were not the first to hijack an aircraft for political purposes, this first initial aircraft hijacking by the PFLP was the first example of the use of hijacking for the purpose of political blackmail. The PFLP's motive was to exchange the Israeli hostages for Arab terrorists held by the Israeli Government. On July 29, a joint six-man delegation representing three Palestinian terrorists organizations, PLO, PFLP, and Al-Fatah, had gone to Algiers to persuade the Algerian authorities to hold on to the airliner and to release the Israeli passengers and crew only in return for more than 1,000 Arab terrorists held in Israel.⁹⁴ Meanwhile, 10 of the detained Israelis had been released by the Algerian authorities on July 27, but 12 male Israelis were still detained. In this situation, the Israeli Government appealed to the United Nations and to the International Civil Aviation Organization(ICAO) to use their good offices to effect the return of the passengers and the plane. As a result of the failure of intense diplomatic activity, plans for an air boycott of Algeria from August 18 were announced by IFALPA on August 13 and promises of support for the air boycott came from the International Air Transportation Federation.⁹⁵

⁹¹ Edward F. Mickolus, *op.cit*, P. 73

⁹² Keesing's Contemporary Archives, August 17-24, 1968, P. 22872

⁹³ David Phillips, *op.cit*, P. 132

⁹⁴ Keesing's Contemporary Archives, *op.cit*, P. 22872

⁹⁵ *Ibid*

In the wake of IFALPA's air boycott announcement, the Algerian Foreign Minister said that Algeria wished to find a satisfactory solution to this delicate problem after stressing that Algeria had nothing whatever to do with the hijacking.⁹⁶ On September 1, 1968, under an arrangement negotiated by the Italian Government, the seven Israeli crew and five male passengers, who had been detained in Algiers were released with the airliner. The PFLP criticized Algeria for releasing the hostages without consulting them. But it was a success for the PFLP, because it was announced in Israel on September 3, 1968 that Israel had informed the International Red Cross that it was releasing 16 Arab terrorists as a gesture of gratitude to the Italian Government for its efforts in negotiating the release of the Israeli airliner, aircrew and passengers.⁹⁷ Naturally the first hijacking operation was regarded as a great victory by the Palestinian terrorist organizations. The most significant outcome of the hijacking was that the Palestinians observed that, regardless of how outraged world reaction was to the hijacking, outrage did not go beyond words. Thus, Palestinian terrorists were encouraged to further pursue new acts of international terrorism.

With this success behind it the PFLP decided to launch a campaign of terror and destruction against El Al itself, its aircraft, its airline facilities and their users in order to hit Israel economically and disrupt this lifeline. The PFLP justified itself in killing civilians on the following grounds:

⁹⁶ Ibid

⁹⁷ Keesing's Contemporary Archives, September 7-14, 1968, P. 22908; Edward F. Mickolus, op.cit, P. 94

"We have no control over the land that was stolen from us and called Israel...; whoever goes to Israel should ask for our permission... Our struggle has barely begun, the worst is yet to come. And it is right for Europe and America to be warned now that there will be no peace until there is justice for Palestine... We will never agree to a peace settlement."⁹⁸

There was also another reason. The PFLP wanted to eliminate El Al which was and is the carrier of the Israeli national flag, the symbol of the existence of the state abroad, visible at any time at international airports.⁹⁹

The attacks on civil aviation were not limited only to the skies. In addition to aircraft hijacking, the Palestinian terrorist organizations initiated two other forms of operation against civil aviation. These were attacks against aircraft and their innocent passengers on the ground, and the sabotage bombing of aircraft in the air. With the introduction of anti-hijacking security measures by the Israeli government after the success of the first operation of aircraft hijacking, the PFLP shifted their efforts to attacking Israeli airliners on the ground; one at Athens airport on December 26, 1968,¹⁰⁰ and another at Zurich on February 18, 1969.¹⁰¹ The incident at Athens brought a fresh crisis in the tense Middle East situation. Two days later Israeli commandos raided Beirut international airport in retaliation for the Athens attack and destroyed 13 Arab airliners, the damage

⁹⁸ Henry W. Degenhardt(ed), Revolutionary and Dissident Movements: An International Guide, Essex: Longman, 1988, P. 281

⁹⁹ Edgar O'Ballance, Language of Violence: The Blood Politics of Terrorism, London: Presidio Press, 1979, PP. 69-70

¹⁰⁰ Edward F. Mickolus, op.cit, PP. 105-106; Keesing's Contemporary Archives, Jan. 25-Feb. 1, 1969, P. 23149

¹⁰¹ Mickolus, Ibid, PP. 113-114; Keesing's, Contemporary Archives, March 5-15, 1969, P. 23229

being estimated at over £15,000,000.¹⁰² This action by the Israelis provoked a world reaction and led the UN Security Council to adopt a resolution condemning Israel for the attack.¹⁰³ Although depicted by the Israelis as a glorious achievement showing the Arabs how their long arm could reach out to punish, Israeli action was in another respect counter-productive. It brought the weakness of the Lebanese government and army to the notice of the Fedayeen, thus encouraging them to expand in Lebanese territory.¹⁰⁴

After these incidents, Israelis reinforced their security precautions on El Al aircraft, installing lockable bullet-proofed cockpit doors and armed sky marshals.¹⁰⁵ Therefore, the PFLP had to adopt and select a soft target. Non-Israeli airliners were selected as targets due to the absence of special security measures at the airports and the lack of security personnel aboard the plane. On August 29, 1969, two members of the PFLP hijacked a TWA flight, flying from Los Angeles to Tel Aviv and forced it to land in Syria.¹⁰⁶ This was the first time it had struck at an airline other than El Al. The reason for this was political. The PFLP statement said that the United States was drawn into the PFLP's aerial war because of her support for Israel and for having sold arms and Phantom jet-fighters to Israel.¹⁰⁷ The Syrians made use of this incident to obtain the release

¹⁰² Israel considered Lebanon as partially responsible for the Athens's episode because it allowed the PFLP to train openly in its territory. See, Keesing's, Ibid

¹⁰³ Ibid, PP. 23149-23150

¹⁰⁴ Edgar O'Ballance, op.cit, P. 72

¹⁰⁵ Richard Clutterbuck, op.cit, P. 80

¹⁰⁶ Keesing's Contemporary Archives, November 15-22, 1969, P. 23670; Mickolus, op.cit, P. 131

¹⁰⁷ Keesing's, Ibid

on October 12, 1969, of 13 Syrians held by Israel and also the two hijackers, Miss Leila Khaled and Salim Assawi. Leila Khaled later underwent three plastic surgery operations to conceal her identity so that she could attempt another mission.¹⁰⁸

Aircraft hijacking also came to be used by the Palestinian organizations as a means of winning the release of terrorists arrested in previous missions. What the PFLP had learned from the previous years of harassing civil aviation was that aircraft hijacking provided hostages who could be traded in exchange for the release of Palestinian terrorists from jail. An incident of this type happened on July 22, 1970, when the six PFLP terrorists hijacked an Olympic Airways aeroplane, carrying 47 passengers and 8 crew members from Beirut to Athens and demanded the release of seven Arab terrorists who were being held in Greece for the attack on an El Al airliner on December 26, 1968, for the attempted hijacking of a TWA flight on December 21, 1969 and also for the attack on the El Al office in Athens.¹⁰⁹ Through the mediation of the International Red Cross official, Andre Rochat, it was announced by the Greek Government, on the day of the incident, that all Arab terrorists detained in Greece would be released within one month and the Greek Government also announced that it had been received assurances from the Arab diplomats that Greece would never again be used for terrorist activities.¹¹⁰ The submission by the Greek authorities

¹⁰⁸ Ibid; Keesing's Contemporary Archives, December 6-13, 1969, Vol. XVII, 1969-1970, P. 23710; See further readings on this incident, Peter Snow and David Phillips, Leila's Hijack War, London: Pan Books, 1970; Leila Khaled, My People Shall Live: The Autobiography of a Revolutionary, London: Hodder and Stoughton, 1973

¹⁰⁹ Mickolus, op.cit, P. 195; Keesing's Contemporary Archives, January 24-31, March 7-14 and August 15-22, 1970, P. 23788, P. 23867 and P. 24142

¹¹⁰ Keesing's, August 15-22, 1970, P. 24142

in this incident encouraged ultimately a number of similar occurrences of this kind, and the use of the tactic quickly spread to non-Palestinian aviation terrorists.

Meanwhile, the tactics of sabotage bombing of aircraft by the Palestinians first appeared at first on February 21, 1970. The Popular Front for the Liberation of Palestine-General Command (PFLP-GC) blew up a Swissair plane, killing all 38 passengers and 8 crew, en route from Zurich to Tel Aviv, and made a similar but abortive attack on an Austrian Airlines aircraft that same day.¹¹¹ Following these incidents, the Israeli Parliament adopted a resolution calling upon all governments, international associations, airlines and pilots' organizations to combat terrorism directed against international civil aviation.¹¹²

The most spectacular Palestinian attack in the history of aviation terrorism took place on September 6, 1970, since then known as "Hijack Sunday". The PFLP terrorists hijacked TWA B-707 en route from Frankfurt to New York over Belgium and diverted to Dawson's Field near Amman, Jordan. Shortly thereafter, a Swissair DC-8, flying from Zurich to New York was hijacked and also forced to fly to Dawson's Field. Minutes later, two hijackers attempted to seize an El Al B-707, flying from Amsterdam to New York. Israeli security guards on board killed the male hijacker, Patrick Arguello, and overpowered the female hijacker, Leila Khaled, who already had one successful hijacking of a TWA flight to Damascus in 1969 to her credit. Leila Khaled was turned over to the British authorities when the El Al aeroplane landed at Heathrow airport in London. Later the same afternoon, a Pan Am B-747, also bound from

¹¹¹ Keesing's, March 7-14, 1970, PP. 23867-23868

¹¹² Ibid

Amsterdam to New York, was hijacked and diverted to Beirut. Though the airport was surrounded by Lebanese police and armoured vehicles, the Lebanese authorities were powerless to intervene as the airport's control tower had been seized by the PFLP terrorists.¹¹³ According to the PFLP spokesman, the hijackings had been aimed at the Middle East peace talks between Egypt and Israel to which the Palestinian terrorist organizations were opposed; that the hijacking of U.S. airliners was a symbolic blow against what was called an American "plot to liquidate the Palestinian cause" by supplying arms to Israel; and that the Swiss airliner was selected as a target to reinforce the terrorist's demands for the release of three terrorists held in Switzerland for the February 1969 attack on an El Al airliner at Zurich airport.¹¹⁴ Meanwhile, the Pan Am Jumbo jet hijacked to Beirut was diverted to Cairo, because it would have been impossible for the plane to land at the Dawson's Field where the TWA and Swiss airliners had already landed. On arriving at Cairo Airport, the passengers and crew were released and the hijackers blew up the plane. A statement from PFLP headquarter said that the Jumbo jet had been blown up in Cairo as a protest against Egypt's acceptance of the Middle East cease-fire agreement. In the mean time, at the Dawson's Field, all women and children except Israeli women and children were allowed to leave Dawson's Field for Amman. A statement issued by the PFLP in Amman said that it would hold as hostages those passengers who were of American, British, Israeli, Swiss and West German nationality until its demands were met. The demands were the immediate release of three terrorists by the Swiss Government, the release of the

¹¹³ Keesing's Contemporary Archives, September 26 - October 3, 1970, P. 24203; Edward F. Mickolus, op.cit, P. 208, 210, and 212-213; David Phillips, op.cit, PP. 139-142

¹¹⁴ Keesing's, Ibid

Arab woman hijacker, Leila Khaled and the return of the body of her accomplice within 72 hours, and the release of three Arab terrorists who were being held for the Munich airport attack by the West German Government, as well as an unspecified number of terrorists held in Israel.¹¹⁵ Through the special mission of the ICRC, headed by M. Andre Rochat, negotiations thus began with the Swiss and Germans initially being willing to deal unilaterally with terrorists to free their own nationals, but the British Government refused the PFLP demand. Instead, the British Prime Minister, Edward Heath, set to work to persuade the other Western Governments concerned to act together on the principle that states should not deal individually with the PFLP. Only in that way did all the hostages stand a chance of being freed. Hence, on September 8, the Berne Five was formed.¹¹⁶ In this situation, to improve their negotiating position with Britain, the PFLP hijacked a British Overseas Aircraft Corporation(BOAC) flight VC-10, flying from Bombay to London on September 9 and forced it to land at Dawson's Field.¹¹⁷ Meanwhile, the Jordanian army was besieging the airfield but held back while various groups of passengers were released on various days, starting with 127 women and children, then 21 Arabs, and so on until eventually only 54 out over 400 originally kidnapped remained in PFLP control. They were split up into groups and were held by the PFLP in refugee camps and the three aircraft were then blown up one after the other. The 54 remaining hostages were finally either released or rescued by Jordanian army. When all

¹¹⁵ Keesing's, Ibid, P. 24204

¹¹⁶ Ibid, P. 24204; Mickolus, op.cit, P. 208

¹¹⁷ Keesing's, Ibid; Mickolus, Ibid, P. 214

hostages were safely returned, the British, Germans and Swiss, as promised during the negotiation, released the seven terrorists including Leila Khaled.¹¹⁸

Even though the PFLP achieved their objective, these spectacular hijackings caused a wave of revulsion all over the world and a major set-back for the Palestinian terrorist organizations. Dawson's Field had been chosen deliberately as the base for the hijacking because of the near autonomy enjoyed at the time by the PLO in Jordan and, to a lesser degree, to make a rescue operation more difficult. This multiple hijack operation was one of the reasons for the Jordanian Civil War. Angered by the incident within his state and fearful of a stronger PLO if left unchecked, King Hussein of Jordan decided to rid himself of his dangerous unwelcomed guests and unleashed his army on the Palestinian terrorist bases.¹¹⁹ After ten days of heavy fighting in Amman, mediation efforts by other Arab Governments, and in particular by President Nasser of Egypt, a truce was brought about, which was signed in Cairo on September 27, 1970. As a result of the Civil War the Palestinian organizations suffered heavy casualties and lost Jordan as a base for operations. It was in mourning for this defeat that a group of young militants from Al Fatah formed the Black September Organization(BSO). Thereafter, the Palestinian terrorists organizations concentrated their attacks mainly against the Jordanian airline, Alia.¹²⁰ The first

118 Keesing's, Ibid, PP. 24205-24209

119 Leroy Thompson, The Rescuers, op.cit, P. 13

120 David Gilmour, Dispossessed: The Ordeal of the Palestinians, 1917-1980, London: Sidgwick and Jackson, 1980, PP. 163-177; Michael Adams, "The Arab-Israeli Confrontation, 1969-1979", in the Middle East and North Africa, 1979-1980, Europa Publications, 1979, PP. 39-40; Keesing's Contemporary Archives, October 10-17, 1970, PP. 24225-24230; Danna A., Armageddon in the Middle East, New York: John Jay Co., 1974, PP. 178-180; David Phillips, op.cit, PP. 147-149

hint of the trouble ahead came when a bomb exploded in an Alia Boeing 707 after it landed at Madrid on August 23, 1971. The target was Hussein's mother, Queen Mother Zien, who had boarded the jet at Amman but deplaned in Istanbul.¹²¹ On September 8, 1971, as if to mark the first anniversary of Dawson's Field and to remind King Hussein that the Palestinian Organizations had not forgotten their black September, a member of Al Fatah hijacked an Alia Caravel to Libya while flying from Beirut to Amman.¹²² Hussein became aware of danger signals, and Alia, like El Al, began to carry security guards to protect itself against Arab terrorists. In the following months, they baffled two more hijack attempts on September 16 and October 4, 1971.¹²³

The Palestinian terrorist organizations have also used their foreign terrorist group allies. The tactic of utilizing personnel from other terrorist groups was a method by which Israeli security could be penetrated. By 1972 Israeli security was extremely tight. However, the security was degined to detect Arab terrorists. A perfect example of this occurred at Lod Airport on May 8, 1972, when three members of the Japanese Red Army(JRA), who had landed with many other passengers on an Air France plane arriving from Rome, suddenly flung hand-grenades and opened fire indiscriminately with automatic weapons at the scores of passengers in the crowded arrival hall. Twenty-five were killed, including 17 from Puerto Rico, and scores were injured. Of the three JRA terrorists carrying out the massacre, one committed suicide, another was killed, and the third, Kozo Okamoto, were captured. Subsequent investigation

¹²¹ Mickolus, op.cit, PP. 275-276

¹²² Ibid, P. 277

¹²³ Ibid, P. 278 and 281

disclosed that all three had close links with the PFLP.¹²⁴ The PFLP issued a statement in Beirut on May 31 claiming "complete responsibility for the brave operation" launched by one of its special groups, and Kozo Okamoto admitted that he and the two dead terrorists had acted on behalf of the PFLP.¹²⁵ The PFLP instigated JRA terrorists to avenge the raid on the Sabena aircraft.

It is worthwhile to note that the Lod airport attack had been made to coincide with the fifth anniversary of the Arab-Israeli war of 1967. One of the terrorist organizations' tactics is their attempt to link actions to specific events in order to reinforce the propaganda value of the incident. They act on fixed dates, for example, the anniversaries of oppressive events, revolutionary anniversaries or other important political occasions. Palestinian terrorist organizations have also timed their actions to sabotage impending political developments not to their liking, or to register opposition to developments they oppose.¹²⁶ For example, after the October 1973 war, in the December of that year, the Arab National Youth Organization (ANYO) attacked a Pan Am airliner at Rome Airport. As a result of this attack, thirty two people were killed and eighteen wounded when five Arabs sprayed it with machine-gun fire. They then seized a Lufthansa aircraft with six hostages at Rome airport and forced it to take off for the Middle East. However, they were refused permission to land by every Arab state,

¹²⁴ Keesing's Contemporary Archives, October 10-17, 1970, PP. 24225-24230; Mickolus, Ibid, PP. 322-324; Yoshihiro Kuriyama, "Terrorism at Tel Aviv Airport and a "New Left" Group in Japan", Asian Survey, Vol. 13, January-June, 1973, PP. 336-346; Patricia G. Steinhoff, "Portrait of a Terrorist: An Interview with Kozo Okamoto", Asian Survey, Vol. 16, July-December, 1976, PP. 831-845

¹²⁵ Keesing's Contemporary Archives, August 26-September 2, 1972, P. 25440

¹²⁶ Ariel Merari and Shlomi, "The International Dimension of Palestinian Terrorism", JCSS Study, No. 6, 1986, PP. 60-61

including Libya, which physically blocked the runways to prevent them from doing so. Finally, they landed in Kuwait where they surrendered to the Kuwait authorities.¹²⁷ Under interrogation, the terrorists revealed that the real plan was to assassinate UN Secretary General Waldheim and Henry Kissinger who were supposed to arrive at Beirut Airport, and the aim of this attack was to apply pressure and thus achieve cancellation of a Middle East Conference due to be opened in Geneva the following day, December 19.¹²⁸ Again, the terrorists of the ANYO hijacked a British Airways VC-10 in Dubai on November 21, 1974.¹²⁹ This incident followed Yasir Arafat's UN speech on November 14 to embarrass both Yasir Arafat and the PLO by demonstrating Palestinian opposition to any policy of moderation.¹³⁰

The popularity of aircraft hijacking as a terrorist tactic diminished at least in part because frequent repetition took away some of its shock value. At the same time, aircraft hijacking was losing favour due to the success of security measures. In addition, under the leadership of Yasir Arafat, the PLO began to stress political and propaganda achievements, notably in obtaining the mandate of the 1974 Rabat Arab summit to be the "sole representative" of the Palestinian people and in gaining widespread recognition in the United Nations and other international organizations.¹³¹ As the PLO sought to refurbish its image, its

¹²⁷ Mickolus, op.cit, PP. 422-423

¹²⁸ Christopher Dobson and Ronald Payne, The Carlos Complex: A pattern of Violence, London: Hodder and Stoughton, 1977, P. 135; John A. Amos, Palestinian Resistance: Organization of a Nationalist Movement, New York: Pergamon Press, 1980, P. 229

¹²⁹ Mickolus, op.cit, P. 491

¹³⁰ John A. Amos, op.cit, P. 229

¹³¹ Henry W. Degenhardt(ed), op.cit, PP. 269-270

terrorist activities declined. In fact, in 1974, Yasir Arafat condemned aircraft hijacking as counter-productive and the PLO repeatedly stated that those responsible for such actions would be brought to trial before Palestinian tribunals.¹³² This in part contributed to reduce a substantial number of such attacks.

Aircraft hijacking by Palestinian terrorist organizations, however, continued to occur at intervals because it remains an unparalleled attention getting device for their cause. On June 27, 1976, an aeroplane belonging to Air France, flying from Tel Aviv to Paris with 259 people, including twelve crew members, was hijacked shortly after it had taken off from Athens by an armed group of three men and a woman calling itself the Che Guevara cell of the Haifa section of the PFLP. After landing at Benghazi in Libya, where one hostages was released, the plane proceeded to the airport at Entebbe, Uganda where President Idi Amin was clearly expecting it.¹³³ After the hijackers had been joined by six further terrorists, they demanded the release of 52 terrorists including Kozo Okamoto held in Israel for the 1972 Lod Airport massacre.¹³⁴ The Israeli Government had meanwhile held consultations and had appointed a special committee to deal with the question of how to react to the hijackers' demand, and announced that it

¹³² Ibid, P. 281

¹³³ Keesing's Contemporary Archives, August 13, 1976, P. 27888; Mickolus, op.cit, PP. 422-423; George Roise, The Directory of International Terrorism, Edinburgh: Mainstream Publishing, 1986, PP. 245-246; U.S. Department of Transportation, FAA, Significant Worldwide Criminal Acts Involving Civil Aviation: 1976, P. 6; Richard, Clutterbuck, Kidnap, Hijack and Extortion: The Response, London: Macmillan Press, 1987, P. 186

¹³⁴ Keesing's Ibid, P. 27888

was ready to begin negotiations.¹³⁵ With no hope of a negotiated settlement, and after intense planning and intelligence gathering, Israeli Government launched a bold rescue operation. On July 3, they dispatched their highly trained anti-terrorist force, Sayaret Maktal, in three Hercules C-10 transport aircraft, via Nairobi, to Entebbe. They landed at Entebbe Airport a few minutes after midnight on July 4, and the commandos poured out and charged straight for the terminal building, detaching flank guards to intercept Ugandan army reinforcements and deal with Ugandan soldiers firing from the control tower. During the operation Israeli forces killed all the hijackers and twenty Ugandan soldiers. Even though one Israeli soldier and four hostages were killed, the operation was highly successful.¹³⁶ The Entebbe rescue operation was a watershed because it marked the first long-distance anti-terrorist strike to rescue hostages and gave hope that other such operations would prove feasible.¹³⁷ The most dramatic reaction to the aviation terrorism so far has undoubtedly been the Israeli Entebbe rescue operation.¹³⁸ The policy adopted by Israel from the outset

135 Ibid, P. 27889

136 Keesing's Ibid, PP. 27889-27890; Chain Herzog, The Arab-Israeli Wars: War and Peace in the Middle East, London: Arms and Armour Press, PP. 327-328; Richard Clutterbuck, Hijack, op.cit, P. 187

137 Leory Thompson, The Rescuers, op.cit, P. 33

138 Another dramatic example of the vital role of crack down hostage-rescue units in combatting aircraft hijacking came when a German Lufthansa flight was hijacked by the four Palestinian terrorists to Mogadishu, Somalia, in October 1977. With the agreement of President Barre of Somalia for the rescue operation, the GSG-9, West Germany's special anti-terrorist police squad, stormed the aircraft. They killed the three terrorists and rescued the passengers. See, Mickolus, op.cit, PP. 735-737; George Roise, op.cit, P. 181; Richard Clutterbuck, Hijack, op.cit, P. 188; Christopher Dobson and Ronald Payne, War Without End: The Terrorists, London: Sphere Books, P. 385; Keesing's Contemporary Archives, April 7, 1978, PP. 28918-28920

rejected any form of compromise with terrorism. The Israelis have always believed in the policy of "an eye for an eye", and have officially adopted the policy of massive retaliation. Although the Entebbe rescue operation did not totally eradicate this form of international terrorism,¹³⁹ it is clear that the Israeli's decisive action profoundly shook the Palestinian terrorist organizations and secured the additional desirable effect of deterring further attacks.

Although the level of aviation terrorism attributable to Arab terrorists has been kept down to a reduced level since the late 1970s, the threat of such violence still remains. More sinister than the number of attacks by Palestinian terrorists in recent years is the change in their nature. Since early 1980 a series of demonstrative attacks featuring indiscriminate massacre have occurred. This change in the nature of the attacks was reflected by the increase in the number of victims. On 23 November, 1985, Palestinian terrorists of the Abu Nidal Organization(ANO), a most dangerous terrorist group led by Sabri al-Banna, which has targeted civilians indiscriminately in its terrorist operations, hijacked an Egyptair flight, carrying 98 passengers and 6 crew members. The hijackers demanded to be flown to Libya or Tunisia but agreed to land in Malta. After landing, the two wounded flight attendants and eleven women were released. Maltese officials refused to supply fuel unless all passengers were released. The hijackers then threatened to kill a passenger every ten minutes, and a total of five persons were shot and thrown off the aircraft. After over 22 hours of negotiating, Egyptian Commandos stormed the aircraft. During this operation, the hijackers threw hand grenades and a fire erupted on the aircraft. As a result

¹³⁹ Paul Wilkinson, Terrorism and the Liberal State, London: Macmillan press, 1986, P. 248

of the incident a total of 60 people were killed and 35 people were injured.¹⁴⁰ Another brutal act of aviation terrorism by the ANO took place on December 27, 1985. The ANO terrorists attacked Rome and Vienna airports with machine-guns and grenades. As a result of those attacks 17 people, including four terrorists, were killed, and 120 people injured.¹⁴¹ The ANO claimed responsibility for the massacres and they justified them as military attacks in retaliation for Israel's bombing of PLO headquarters in Tunis in October 1985. In addition, one of the reasons that prompted the ANO to organize the massacres at Rome and Vienna undoubtedly had to do with the lenient attitude taken by the Italian and Austrian governments towards the PLO, with which Abu Nidal considers himself at war. The attacks drew widespread condemnation from most states, including Italy and Austria that had been the most pro-Palestinian.¹⁴² The Israeli government issued a series of statements warning of unspecified military retaliation for the attacks.¹⁴³

International terrorism in the forms of aircraft hijackings and sabotage attacks against civil aviation by Palestinian terrorist organizations has kept the Palestinian problem at the forefront of world attention and brought the Palestinian issue on to the international agenda. Attacks against civil aviation by Palestinian terrorist organizations, however, have increased the conflict in the

¹⁴⁰ U.S. Department of Transportation, F.A.A., Worldwide Significant Criminal Acts Involving Civil Aviation: 1985, P. 21

¹⁴¹ Ibid, 1985, P. 24; U.S. Department of Defence, Terrorist Group Profiles, Washington,DC: U.S. G.P.O, 1988, P. 7

¹⁴² Signor Bettino, the Italian Prime Minister, described the attacks as "a massacre of the innocents". See, Keesing's Contemporary Archives, March 1986, P. 34260

¹⁴³ Ibid, P. 34261

Middle East and have made peaceful settlement extremely difficult. The employment of international terrorist tactics to achieve their political goals has resulted in an escalating cycle of violence. This has moved the Israeli government to adopt a hard line position. Moreover, the Palestinians have lost the ability to justify the morality of their actions by making indiscriminate attacks on civil aviation. Although the frequency of the Palestinian terrorist attacks against civil aviation has decreased since late 1970s, attacks against soft targets such as airline offices continue to occur, mainly by groups belonging to the "rejectionist group". Recent attacks at Rome and Vienna airports in 1985 and the abortive El Al sabotage bomb attack in 1986 show that the Palestinian war against civil aviation continues without end.

III-3-1-3. Principal Palestinian Terrorist Groups That Have Conducted Attacks On Civil Aviation Targets

III-3-1-3-1. Popular Front for the Liberation of Palestine(PFLP)

The PFLP was established under the leadership of George Habash as a merger of three formerly independent groups, the Arab Nationalist Movement's Heroes of Return, the National Front for the Liberation of Palestine, and the Ahmad Jibril's Palestine Liberation Front, after the Arab defeat in the June 1967.¹⁴⁴ The PFLP followed a Marxist-Leninist ideology, terminology and slogans and saw itself a part of a world revolutionary force with such allies as the Cubans, Chinese and North Koreans, but less so the Soviets because they

¹⁴⁴ Jillian Becker, The PLO: The Rise and Fall of the Palestine Liberation Organization, London: Weidenfeld and Nicolson, 1984, P. 70; U.S. Department of Defence, Terrorist Group Profiles, op.cit, P. 25

were advocating a political settlement.¹⁴⁵ The objective of the PFLP is to create an image of the Palestinian struggle as part of the world-wide revolution. Habash said once, "We must recognize that our revolution is a phase of world revolution: it is not limited to recognizing Palestine"¹⁴⁶

The failure of the implementation of guerrilla warfare and consequent losses in manpower that developed in the wake of the June 1967 war were the main factors that gave rise to the PFLP launched terroristic operations. The PFLP established itself early on as one of the most violent terrorist organizations. It concurrently sought to establish strong ties to other Marxist revolutionary organization such as the Irish Republican Army (IRA), the German Bader-Meinhoff group, and the Japanese Red Army (JRA).¹⁴⁷ Habash strongly favoured well-publicized attacks on civilian targets, and the PFLP reputation for ruthlessness was built on that strategy. Following the first aircraft hijacking of an El Al aeroplane to Algeria in July 1968, the PFLP engaged in a series of spectacular aviation terroristic campaigns including the Dawson's Field hijackings in September 1970 and Lod airport massacre in May 1972. The PFLP justified such operations by saying that they keep the Palestinian problem alive and make the world conscious of its existence.¹⁴⁸ However, such operations

145 Aryeh Y. Yodfat and Yuval Arnon-Ohanna, PLO Strategy and Politics, London: Croom Helm, 1981, P. 25; Jillian Becker, *Ibid*; Helena Cobban, The Palestinian Liberation Organization: People, Power and Politics, Cambridge: Cambridge University Press, 1984, PP. 140-152

146 Interviews with Yasir Arafat and George Habash, March 1972, in Fallaci, Interviste con la Storia, cited by Claire Sterling, The Terror Network: The Secret War of International Terrorism, London: Weidenfeld and Nicolson, 1981, P. 121

147 Aryeh Y. Yodfat and Yuval Arnon-Ohanna, *op.cit*, P. 26

148 *Ibid*,

harm the Palestinian organizations more than they helped them. For example, the multiple hijackings in September 1970 afforded justification for attacking them.

Moreover, George Habash has a powerful attachment to operations within Israel. After the PFLP had submitted to strong pressure from the PLO mainstream led by Yasir Arafat in 1975 and stopped aircraft hijacking, Habash said: "Our military action abroad is auxiliary action, compared to our military action in the occupied lands, which form the basic and principal focus of our revolutionary struggle."¹⁴⁹ The theory of Habash was to take advantage of the characteristics of terrorism as a tactic, avoiding direct confrontation with Israel by choosing a weak arena. The PFLP's leaders reached the conclusion that a combination of activities both within and outside the state of Israel constituted the correct organizational response to the new military situation.

III-3-1-3-2. Abu Nidal Organization (ANO)/Fatah Revolutionary Council

This terrorist organization was established in the late 1973 under the leadership of Sabri Al Banna, who was once the Fatah representative in Iraq. The Abu Nidal Organization, a rejectionist and extremely violent Palestinian terrorist group, split from Fatah in late 1973 when Yasir Arafat decided to restrict terrorism solely to Israeli targets in Israel and the occupied territories. After the October 1973 Arab-Israeli war, Abu Nidal became increasingly opposed to the ideological and political stance adopted by Arafat and his

¹⁴⁹ Interview in al-Dustur, January 25, 1975, cited by Ariel Merari and Shlomi Elad, *op.cit.*, P. 17

supporters whom he considered moderate.¹⁵⁰ The ANO opposes all efforts toward political reconciliation of the Arab-Israeli conflict. The group contends that both inter-Arab and intra-Palestinian terrorism are needed to precipitate an all-embracing Arab revolution that alone can lead to the liberation of occupied Palestine. Abu Nidal determined to fight any effort at moderation by continuing international terrorist operations.¹⁵¹

ANO initially operated from Iraq, under the aegis of the Iraqi government until the end of 1980, when Iraq played a decreased role in the functioning of the ANO as a result of the Iraqi government putting limitations on the group's activities. Since then this group has been sponsored by Syria from 1981 to 1987, and Libya has continued to give support to the ANO to this day.¹⁵² ANO developed rapidly as an effective terrorist organization, operating under a variety of names, such as the Abu Nidal Faction, Black June, Black September and Arab Revolutionary Brigades, appropriate to specific targets. For example, under Iraqi influence during 1977-78, it concentrated on Syrian targets, using the name Black June Organization (BJO).¹⁵³ The first terroristic act by the ANO

150 Foreign and Commonwealth Office, Palestine Liberation Organization, Background Brief, September, 1989, P. 20

151 British Foreign and Commonwealth Office, "Abu Nidal Group and State Terrorism" in Yonah Alexander (ed), The Annual on Terrorism, Dordrecht, the Netherlands: Martinus Nijhoff Publishers, 1987, P. 283

152 Patrick Seale, Abu Nidal: A Gun For Hire, London: Hutchinson, 1992, PP. 109-150; Henry W. Degenhardt(ed), Revolutionary and Dissident Movements: An International Guide, Essex: Longman, 1988, P. 276; U.S. Department of Defence, Terrorist Group Profiles, op.cit, PP. 5-6

153 The Black June took its name from the Syrian intervention in the civil war in Lebanon in June 1976, after which the Palestinian-backed Lebanese Muslim Leftists were defeated by the combined forces of the Syrians and the Lebanese Christians. See, John Richard Thackrah, Encyclopedia of Terrorism and Political

against a civil aviation target took place on September 23, 1983 with the sabotage mid-air bombing of an aeroplane belonging to Gulf Air. On that occasion the ANO used the name Arab Revolutionary Brigades (ARB), a name used by the ANO for attacks on Kuwaiti, Jordanian and UAE targets.¹⁵⁴ This organization was also responsible for attacks on Rome and Vienna airports in December, 1985, and the hijacking of a Pan Am airliner to Karachi, Pakistan, in September, 1986.

III-3-1-3-3. Black September Organization (BSO)

The Black September Organization (BSO) was created in 1971, and took its name from the debacle that took place in Jordan in September 1970, when King Hussein of Jordan turned his army against the Palestinian organizations driving them into exile in Lebanon, Syria and Iraq.¹⁵⁵ It was primarily conceived out of the desire to overthrow King Hussein's regime in Jordan and revenge the defeat of September 1970 at his hands.¹⁵⁶ Unlike any other organizations, the BSO, rather than operating within an overall ideological framework, aimed to regain the lost honour of the Palestinian people.¹⁵⁷

Violence, London: Routledge & Kegan Paul, 1987, P. 27; Peter Janke, Guerrillas and Terrorists Organization, London: Harvester Press, 1983, P. 243

¹⁵⁴ British Foreign and Commonwealth Office, Abu Nidal Group, op.cit, P. 294

¹⁵⁵ George Roise, op.cit, PP. 74-75

¹⁵⁶ Edgar O'Ballance, Language of Violence, op.cit, P. 107

¹⁵⁷ Ariel Merari and Shlomi Elad, op.cit, P. 22

The first operation of the BSO was the assassination of the Jordanian Prime Minister, Wasfi Al Tal, on November 28, 1971. Since then, the organization had been identified with acts of terrorism involving assassinations, letter bombings and attacks on civil aviation targets. The most spectacular terrorist attack by the BSO was the Munich Olympic Massacre in September 1972. This incident was followed by the hijacking of a Lufthansa airliner on October 29, 1972. Two terrorists of the BSO hijacked a Lufthansa airliner flying from Damascus to Frankfurt and obtained the release of the three surviving terrorists who had been captured during the Munich massacre operation.¹⁵⁸ Another act of violence against civil aviation attributed to this group was the attack at Athens in August 1973, killing 5 people and injuring 55 others. As a result of a PLO decision to suspend terrorist operations, the Black September Organization ceased its operations in late 1974.¹⁵⁹

III-3-1-3-4. Popular Front for the Liberation of Palestine-General Command(PFLP-GC)

PFLP-GC was established by Ahmad Jibril in 1968, when he took his faction, the former Palestine Liberation Front (PLF), out of the PFLP following a series of internal disputes. Jibril, who was an officer in the Syrian army, was interested in developing conventional military capabilities to complement PFLP-GC terrorist operations.¹⁶⁰ The PFLP-GC believes that the Palestinians should

¹⁵⁸ Edward F. Micklous, op.cit, PP. 355-356

¹⁵⁹ Peter Janke, op.cit, P. 86

¹⁶⁰ Foreign and Commonwealth Office, Palestine Liberation Organization, op.cit, P. 17; U.S. Department of Defence, Terrorist Group Profiles, op.cit, P. 26

aim to liberate the whole of mandate Palestine by means of armed struggle alone.¹⁶¹ In its early days, the organization conducted intermittent raids into Israel and was responsible for a number of international terrorist attacks, including the destruction of a Swissair aircraft and an explosion on board an Austrian airliner, in 1970. Recently, a number of PFLP-GC members, who possessed a cache of weapons, including barometric pressure bombs constructed for use against aeroplanes in flight, were arrested in Germany in October 1988.¹⁶² Subsequently, there have been widespread allegations, vehemently denied by Jibril, that the PFLP-GC was responsible for the destruction of Pan Am flight 103 over Lockerbie in December 1988.¹⁶³

Particularly worrisome is the fact that the PFLP-GC possess sophisticated weapons in its arsenal such as Soviet SA-7 anti-aircraft missiles and RPG-7 rockets, and light aircraft such as motorized hang gliders and ultralights.¹⁶⁴ As a result, there is no doubt that the PFLP-GC is one of the most dangerous and threatening organization for the future.

III-3-1-4. The Israeli Responses

Palestinian terrorist attacks against civil aviation presented a great challenge to Israel, as well as to the rest of the world. As a principal victim of Palestinian

¹⁶¹ Ibid

¹⁶² Keesing's Record of World Events, Vol. 35, No. 4, 1989, P. 36606

¹⁶³ Ibid

¹⁶⁴ U.S. Department of Defence, Terrorist Group Profiles, op.cit, P. 26

terrorism, the Israeli government has introduced many effective passive measures to prevent aviation terrorism and to reduce the effects of such attacks. Moreover, Israel generally has refused to negotiate with terrorists or to meet their demands. However, Israel's passive counter-measures have not been sufficient to terminate aviation terrorism. The controversial issue arose whether Israel should respond to aviation terrorism just as she had to terrorists attacks within Israeli territory - namely, by striking at their bases. This issue has never been satisfactory resolved.

In fact, in the late 1960s, the Israeli government adopted a policy of military retaliation against Palestinian terrorist attacks. Following the El Al aircraft hijacking to Algiers and the attack at Athens airport, Israeli commandos attacked Beirut airport and destroyed several civilian aircraft. The Beirut airport attack was decided upon because Israel assumed that the responsibility for the Palestinian terrorist operations against Israeli targets fell on Arab governments which had provided support to Palestinian terrorist organizations. The response of the international community following the Israeli action was largely negative, which had an important impact on the Israeli government. As an act of military reprisal, it failed to prevent international terrorism.

In Israel's battle against aviation terrorism committed by Palestinian terrorists, their main response was the introduction of preventive security measures. The wave of aircraft hijacking in the late 1960s resulted in placement of armed security guards on all El Al aircraft, the installation of electronic detection devices at airports and the stationing of Israeli security staff at foreign airports served by El Al airliners.¹⁶⁵ The best known, and possibly most

¹⁶⁵ Hanan Alon, Countering Palestinian Terrorism In Israel: Toward a Policy Analysis of Countermeasures, RAND, N-1567-FF, 1980, P. 81

stringent, security measures are those undertaken by El Al airlines. Security for Israeli airliners is divided into two distinctive components: airport and aircraft.

At all El Al points of departure, passengers are usually asked to arrive two and half hours before flight time for the luggage security procedures and interrogations. While all luggage is physically searched for weapons and explosive devices, passengers are asked a list of pre-rehearsed questions. These questions include: What is the purpose of your trip? Is this luggage yours? Did you pack it yourself? Do you carry any electronic devices? Has anyone given you anything, a parcel, a letter or gift?. The answers, if the security officers have any suspicions, are cross-checked by telephone with the family or the friends of passengers.¹⁶⁶ If complete security is still not guaranteed, the passenger or potential terrorist can expect to be searched once again and even denied access to the aircraft. In addition to high-technological security devices, the Israelis have developed the safety of their airlines through the employment of labour intensive security systems. The routine instigated by El Al exemplifies Israel's belief in human ability over modern security devices. One writer advocates Israel's system because:

"While a metal detector can indicate if a passenger is carrying gun, and an X-ray machine can detect a hidden gun or hand-grenade in a travel bag, and while new expensive machines can detect the odour and chemical signature of plastic explosives, they do have very real limitations. Only a specially trained individual can detect the nervous sweat of a man carrying a pistol, grenade, or a sophisticated bomb".¹⁶⁷

166 Gayle Rivers, The War against the Terrorists: How to Win it, New York: Charter Books, 1986, P. 58

167 Samuel M. Katz, Guards Without Frontiers: Israel's War Against Terrorism, London: Arms and Armour, 1990, P. 72

The effectiveness of the Israeli security system for El Al was demonstrated on April 17, 1986, when a pregnant Irish woman named Ann Marie Murphy was arrested at Heathrow airport in London. In fact, a Palestinian terrorist, Nazir Hindawi, tried to destroy El Al Flight 016 in mid-air with 373 people on board by a sophisticated plastic bomb hidden in the luggage of his girl friend, Murphy, without her knowledge. During the typical check-in process, Israeli security staff questioned Murphy as to the reason for her trip to Israel. Not being a Jew, being clearly pregnant and travelling alone, Murphy aroused great suspicion. After admitting that the baby's father was a Jordanian-born Palestinian, Nizar Hindawi, who wanted to avoid El Al because he was a Palestinian, the El Al security staff searched her luggage, and discovered 1.5 kilograms of Semtex attached to a sophisticated detonating device. Consequently, the whole story of the abortive bomb attack against El Al was revealed to the world. In this case, there is no doubt that the systematic El Al security system saved the lives of innocent passengers and crew members.

Once on board, the security only increases. Israelis take extreme security measures to protect their national airlines in flight. These included armoured-plated reinforcement of the fuselage and all cargo areas, intended to secure the pressurized aircraft against an explosion or a mid-air shootout. It was demonstrated that this precaution was successful in August 1972, when a bomb went off in an El Al aircraft just after taking off from Rome airport. The damage was apparently limited and the aircraft was able to return to Rome airport without any casualty.¹⁶⁸ Now the Israelis go a step further. After a thorough initial search, luggage and other cargo are placed inside armoured altitude chambers. The air is then pumped out of these armoured casings, simulating the

¹⁶⁸ Samuel M. Katz, *Ibid*, P. 73

decrease in atmospheric pressure in the luggage hold as the aircraft ascends. If any bag contained an explosive that relied on air pressure rather than time delay, it would go off harmlessly in the armoured container.¹⁶⁹ Moreover, it is also known that, as a counter-measure against missile attack, the Israelis use electronic infra-red deflectors to thwart heat-seeking SAM missiles. In addition, at Lod airport in Israel, passengers are taken by bus to aircraft parked on the field, which provides better security for aircraft. The massive security measures which Israel has applied to El Al airlines might be considered extreme, but the measures seem to have helped make El Al safe from aviation terrorism.

With the success of El Al's security system, many experts have suggested that airlines and airports should follow the direction taken by El Al. However, it is proper to note that El Al is a unique airline for the following reasons: i) Under the constant threat of violent attack, the Israeli government demands constant vigilance to protect El Al, the symbol of Israeli identity, from attack by hostile Arab states and extreme Palestinian terrorist organizations. ii) El Al is a small international carrier with only around twenty aircraft in its fleet, and the airline has few destinations to service. Consequently, El Al is able to dispatch its own highly trained security teams at any departure point. iii) As Israel has only one international airport, this allows it to achieve El Al's operational centralisation at Ben Gurion airport in Tel Aviv. iv) El Al obtains unparalleled state support and intelligence information can easily be fed into its advanced security system since El Al is a state-run airline. For these reasons, El Al was and is able to develop its own unique security systems. In a sense, it is impossible to apply El Al type total security systems to a major airline offering a broader range of flights from far more airports. The adoption of slow and labour-intensive El Al security

¹⁶⁹ Gayle Rivers, *op.cit*, P. 58

systems may bring about problems such as airport congestion and may also disconcert. Professor Paul Wilkinson observed:

"If all aviation authorities were to introduce military-style security of the type utilised by El Al, the whole civil aviation system would rapidly seize up".¹⁷⁰

Furthermore, my former colleague, Dr. Robin Hill, points out that:

"The accelerating surge of passenger pressure will make it unrealistic and practically impossible for El Al's slow and steady methods to be adopted as common procedures because the time factor involved would result in unconscionable levels of terminal congestion".¹⁷¹

Although there is no doubt that El Al's security system is a model example for the safety of civil aviation which other airlines might follow, it is unlikely that, with the expected expansion of passenger throughput in the next decade, the adoption of the entire package of El Al's security measures is applicable to the aviation market in general. The size and complexity of the operation at major airports, and the enormous numbers of passengers and luggage passing through means that it would be impracticable to follow all security procedures to El Al standards. The fact that there is no effective combination of techniques which ensure passenger convenience and swiftness of operation poses a dilemma for the decision makers. In this respect, the design of aviation security for the future should not slow down the progress of passengers through the various controls. Under the present circumstances, however, it is likely that many other airlines could gain benefits by emulating El Al's security systems. In emergency situations where greater attention must be given, by the adoption of El Al type security methods, many airlines can produce good results for the safety of civil aviation. This was demonstrated during the Gulf crisis. The Western

¹⁷⁰ Paul Wilkinson, The Lessons of Lockerbie, op.cit, P. 15

¹⁷¹ Robin E. Hill, op.cit, P. 217

governments and airline industry possess the accumulated knowledge and the technology but not the will to enforce the tight security measures of El Al.

III-3-2. Other Cases

As the quest for a Palestinian homeland has gradually gained a certain credibility and respectability, the aim to get worldwide public attention for the Palestinian problem has been abandoned. This has resulted in reducing the number of attacks on civil aviation by the Palestinian groups.

Other Middle Eastern Muslim terrorist groups, however, began to adopt aviation terrorism as their tactic on a large scale from the late 1970s. Since Ayatollah Ruhollah Khomeini came into power in Iran in February 1979, terrorism has been employed as a tool of foreign and interior policy by revolutionary Iran. The phenomenon gained impetus in the early 1980s, when the Hezbollah organization started to operate in Lebanon and in the international arena, and Shia terrorism became one of the most prominent expressions of international terrorism. A variety of tactics including aircraft hijacking have come to be associated with Iranian-sponsored international terrorism. During the 1980s, Shia terrorists were involved in at least 13 aircraft hijacking incidents. In most cases, aircraft hijackings developed into serious crisis situations involving many states. Diverse states thus have been confronted with complex political and diplomatic challenges associated with attacks against civil aviation by Shia terrorist groups. The challenges have been connected with the fact that the initiators and supporters of the terrorist attacks were other sovereign states. Moreover, the systematic employment of hijacking tactics and the high lethality of the attacks have provided great dilemmas for the targeted states, which have

of the attacks have provided great dilemmas for the targeted states, which have had to cope with intense public pressure to safeguard the hostages.

The aircraft hijacking by Shia fundamentalist groups was launched in late 1970s. When the Shia Muslim leader, Imam Musa Sadr, disappeared in August 1978 while on a visit to Libya, Amal, which was founded in mid-1970s in an attempt to ensure adequate representation for the Shia population in Lebanon, began to launch actions against Lebanese leftists and Libya. The disappearance of Musa, in fact, prompted Amal to launch a campaign of aircraft hijackings to gain the release of its leader. The first attack occurred on January 16, 1979, when a Middle Eastern Airlines(MEA) was hijacked by six members of Amal. The hijackers demanded the release of their leader and a news conference was held in Beirut by hijackers to publicize their demand.¹⁷² This incident was followed by more than 6 other aircraft hijacking attempts with the same aim of releasing Imam Musa Sadr. This series of aircraft hijackings by Amal failed to cause a great impact on international affairs possibly because of the mysterious circumstances around the disappearance of its leader.

Meanwhile, Hezbollah which was established in early 1983 under the influence of Islamic revolution in Iran launched its aviation terrorism campaign against moderate Arab states and the West. Its first operation was the successful hijacking of an aeroplane of Air France to Teheran. The hijackers demanded the release of Lebanese prisoners in French prisons and the withdrawal of French troops from Chad and Lebanon.¹⁷³ The next major operation by Hezbollah was the hijacking of a Kuwaiti Airlines aeroplane to Tehran in 1984. The hijackers

¹⁷² U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation: January-December 1979, P. 1

¹⁷³ U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation: January-December 1983, P. 16

attacks against U.S. and French installations. Kuwaiti authorities refused to meet this demand and the hijackers were overpowered by Iranian security forces.¹⁷⁴ Like previous hijackings by Amal, the aim of releasing 17 Lebanese prisoners featured on several occasions including another Kuwaiti aircraft hijacking in 1988.¹⁷⁵ As one of the most sophisticated terrorist organizations, Hezbollah provides a great threat to civil aviation. This has been demonstrated by incidents such as a TWA 847 aircraft hijacking in 1985, which will be discussed in Chapter IV in detail. More recently, in the wake of the assassination of Hezbollah leader, Sheikh Abbas Musawi, by Israeli forces in February 16, 1992,¹⁷⁶ it is not difficult to anticipate that terrorist action aimed at revenge will be escalated by Hezbollah. At Musawi's funeral, Hezbollah vowed that they would avenge.¹⁷⁷ This suggests a strong indication that Hezbollah might revert to international terrorism including attacks against civil aviation in reaction to the death of their leader. In fact, a revenge operation was begun on March 7, 1992, when the top security officer, Ehud Sadan, at the Israeli embassy in Turkey was killed by Hezbollah terrorists who planted a bomb in his car. Hezbollah claimed responsibility for this attack. A caller on behalf of the Islamic Revenge Organisation told one newspaper that "We have given an answer to the Israelis."¹⁷⁸ It is believed this was a reference to Israel's assassination of

¹⁷⁴ U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation: January-December 1984, P. 17

¹⁷⁵ For more information and useful analyses on this incident, see Robin E. Hill, *op.cit.*, PP. 56-94

¹⁷⁶ The Times, February 17, 1992

¹⁷⁷ The Guardian, February 18, 1992

¹⁷⁸ The Sunday Times, March 8, 1992

Musawi. Another much more serious and destructive car bomb attack against an Israeli embassy to avenge Israel's killing of Musawi occurred on March 17, 1992, in Buenos Aires, Argentina. As a result of the attack, 29 people were killed and more than 240 people were injured. Hezbollah also claimed responsibility.¹⁷⁹

In addition to the threats by Shia Muslim terrorists, it is extremely important to note that the recent Gulf conflict marks a point of divergence in international terrorism as targets include airports and civil airliners.¹⁸⁰ When civil aviation was threatened by the Iraqi regime of Saddam Hussein during the Gulf War, both the nature of the threats and its targets were clear. Although the intention to use international terrorism as an auxiliary weapon in the Gulf War came to nothing thanks to the combined efforts of the coalition governments, there is still a danger.¹⁸¹ The prime targets are the carriers and airline facilities belonging to high profile states such as the United States, the United Kingdom, Israel, Germany and France. Furthermore, in the wake of Iraq's invasion of Kuwait, the new conspicuously pro-Western allegiance of moderate Arab states brings forth new targets. The civil aviation of Egypt, Syria, and Saudi Arabia as well as Kuwait, all of which actively support the U.S. and U.K.-led alliance, may be targeted due to the Arab political divisions following the Gulf crisis. The airports in the major Western states, however, are unlikely to be the main targets for the sophisticated terrorists, although they will continue to be at considerable risk. There is a great possibility that terrorists would find and exploit the weak links in the international aviation network. In this respect, a major enhancement of

¹⁷⁹ The International Herald Tribune, March 21-22, 1992

¹⁸⁰ "Airport go on war footing", Airport Support, February 1991, P. 5

¹⁸¹ "The Changing Threat", Airports International, March 1992, P. 17

counter-terrorist measures should be concentrated on the vulnerable airports in Africa, Asia and the Mediterranean states.

III-3-2-1. The Responses of Middle Eastern States

As Middle Eastern states, principal supporters of the various Middle Eastern terrorist organizations, have recognized that they are also exposed and vulnerable to aviation terrorism, some of the moderate Arab governments including Kuwait, Egypt and Saudi Arabia have taken a hard line policy in combating aviation terrorism since the late 1970s. However, it is important to note that some of the Arab states such as Iran, Iraq, Syria and Libya continue to maintain close relations with Palestinian and Shia terrorist organizations and provide direct and indirect support to them. Since the late 1970s, as Kuwait has emerged dramatically as a victim of the aviation terrorism campaign, the government of Kuwait has started to take firm policy of "no compromise" toward the threat of aviation terrorism. This firm stand was demonstrated in December 1984, when a Kuwaiti airliner was hijacked by Shia terrorists. The hijackers demanded the release of the 17 prisoners jailed in Kuwait for bomb attacks against U.S. and French installations. The hijackers forced the pilot to land in Teheran where over the next 6 days the terrorists beat, tortured, harassed at least six passengers and eventually killed two Americans.¹⁸² However, the Kuwaiti Government showed great determination in refusing to release the 17 prisoners. Even when the Iranians finally moved in and ended the ordeal, the

¹⁸² Time, December 17, 1985, PP. 24-26; U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation: January-December 1984, P. 17

Kuwaiti authorities thanked the Iranian authorities, but still refused to allow any of the 17 prisoners to be freed.

Kuwait's "no compromise" policy was severely tried during the hijacking crisis in 1988, when a Kuwaiti Airways B-747 flying between Bangkok and Kuwait was hijacked by terrorists over Strait of Hormuz and diverted to Mashad in Iran. During a two-week period, the plane flew to Larnaca in Cyprus and finally to Algiers. The 122 passengers aboard included 3 distant members of Kuwaiti royal family. The hijackers shot two Kuwaiti soldiers at Larnaca; they threatened to blow up the plane; they got one of the royal personages to call on the Kuwaiti Government to release the 17 prisoners. However, none of these threats worked. The Kuwaiti Government maintained a firm policy of not yielding to terrorism. One Kuwaiti newspaper supported the government's policy by reporting: "Even if they kill all the hostages there are on the plane, we will never, ever release the killers who are here in Kuwait".¹⁸³ The hijackers, eventually, were forced to leave Algeria empty handed. In this case, there is no doubt that the determination of the government of Kuwait, and the fact that there was no sign of it ever changing its policy against terrorists brought this exploit to an abrupt end. This affair provided an unequivocal warning to terrorists that further hijackings against Kuwait would be of no effect. Despite continuing threats from Shia terrorists, the Kuwaiti authorities remained steadfast in their refusal to release the 17 Kuwaiti prisoners. After the Iraqi invasion, the prisoners either escaped or were released.

As a result of adopting a hard line policy in dealing with the hijackers, the Kuwaiti Government also became involved in a number of international counter-

¹⁸³ Winnipeg Free Press, April 15, 1988

terrorism efforts. For example, in November 1988, the Kuwaiti Cabinet endorsed the international convention on acts of violence at civil airports.¹⁸⁴

Like Kuwait, since the late 1970s Egypt has taken a firm counter-terrorism stand and has called for stronger international cooperation to combat terrorism, including improved sharing of terrorism related information and strengthened international protocols dealing with arrest, extradition, and prosecution of terrorists. In the early stage, to deter aircraft hijacking, Egypt established a special counter-terrorism unit, known as Saiqa("lightning"), in the late 1970s.¹⁸⁵ However, the reputation of Egypt's anti-terrorist unit does not stand very high due to two disastrous assaults. In February 1978, two Palestinian terrorists gunned down a close friend of Egyptian President Anwar Sadat in Cyprus. After the killing, the two terrorists took several hostages. Some of the hostages were released in return for safe passage to the airport at Larnaca where an aircraft of Cyprus Airways was put at their disposal. After flying around the Middle East and being refused permission to land in numerous states, the aircraft returned to Cyprus. In the meanwhile, Egypt had dispatched 100 members of Saiqa to Cyprus, though the Cypriot authorities had been informed a group of negotiators was on its way. Despite the fact that negotiation had already progressed to a level where the freeing of the hostages was apparently imminent, the Saiqa attacked the hijackers, resulting in a firefight with Cypriot forces. The incident resulted in 15 deaths and 22 injuries. The two terrorists released their hostages

184 U.S. Department of State, Patterns of Global Terrorism: 1989, P. 13

185 Leroy Thompson, The Rescuers: The World's Top Anti-Terrorist Units, Devon, U.K.: David & Charles Publisher, 1986, P. 167

and surrendered to the authorities.¹⁸⁶ The second abortive operation was even more of a disaster. On November 23, 1985, an Egyptian aircraft carrying 92 passengers was hijacked by Palestinian terrorists and landed in Malta. This time, Force 777, Egypt's current anti-terrorist unit, was sent to Malta to carry out a rescue operation if needed. In this case, the Maltese agreed to the rescue operation. The Egyptian anti-terrorist unit was on the ground for 11 hours waiting for orders to go in, but did not seem to have used the time gathering intelligence about the whereabouts of the hijackers and their armament despite the availability of released hostages and the possibility of using surveillance devices. Five passengers had been shot prior to the Egyptian assault, which would certainly justify going in. However, the rescue operation went badly wrong, due to its hasty planning. Force 777 entered through the baggage compartment but the opening of the door in the belly of the aircraft triggered a warning buzzer and light in the cockpit. During the struggle, the hijackers threw hand grenades and a fire erupted on the aeroplane. As a result of the violence a total of 60 people were killed, including 2 of the hijackers, and approximately 35 people were injured.¹⁸⁷

The storming of the hijacked Egyptian airliner at Malta abruptly reminded the world of the high cost of an emerging international consensus for a hard line policy toward terrorism. The publicity given to such commando feats as the 1976 Israeli raid at Entebbe, and West Germany's 1977 rescue operation at

186 Edward F. Mickolus, *op.cit.*, PP.774-775; U.S. Department of Transportation, FAA, Significant Worldwide Criminal Acts Involving Civil Aviation: January-December 1978, P. 2;

187 *Time*, December 9, 1985, PP. 6-8; Leroy Thompson, *op.cit.*, P. 168; U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation: January-December 1985, P. 21; Richard Clutterbuck, Kidnap, Hijack and Extortion, London: Macmillan Press, 1987, P. 195

Mogadishu, Somalia, may have inflated international expectation. The international community, however, has to be aware that such methods heighten the risk to hostages. According to a study by the California-based RAND Corporation, 79% of all hostage deaths in terrorist situations occur during rescue operations.¹⁸⁸ Another problem is that terrorists can learn new techniques from their clashes with anti-terrorist forces. One sign of that learning process is that would-be airline hijackers now tend to be much more heavily armed than they were in the past. It is now clear that terrorists anticipate such operations and set up specific defences against them. At the same time, the recent strategy adopted by terrorists, primarily Arab fundamentalists, whereby they are willing and eager to sacrifice their own lives enormously complicates anti-terrorist operations. Using a show of military force to convince them that their position is hopeless does not facilitate their surrender; instead, it inflames their fanaticism. Although some experts doubt that force will ever prevent acts of terrorism, the best argument for the increased use of anti-terrorist units rests in their deterrent effect. Despite the loss of 58 innocent lives, the strong determination of the Egyptian government toward terrorism underscored the principle that terrorists must be punished whatever the price. In this sense, Egypt's bold action received strong backing across Europe, in Israel and in a number of Arab states. But what long-term impact the bloody incident on Malta will have on the growing war against terrorism still is uncertain. Although the Egyptair affair triggered further sober discussion on this matter, it is clear that there will be many more losses if the international community does not act. If the international community vacillates, terrorists will gain the upper hand.

¹⁸⁸ U.S. News & World Report, December 9, 1985, P. 30

After this incident, training assistance for the anti-terrorist unit has been given by GSG-9, GIGN, and U.S. experts at the request of the Egyptian Government. In addition, in cooperation with the United States and other Western states, Egypt has taken steps to strengthen its anti-aviation terrorism capabilities. These include increased training and education for security officers involved in civil aviation security, improved aviation security procedures and safeguards at Cairo's international airport.¹⁸⁹

Saudi Arabia, to cope with aviation terrorism, also established an anti-terrorist unit in 1971. It has received extensive training from GIGN, GSG-9 and U.S. anti-terrorist experts. In addition, following the cover up in the late 1970s of the hijacking and burning of a Saudi aircraft, the Saudi Government introduced the programme of sky marshals and more emphasis has been put on training anti-terrorist forces to retake a hijacked airliner.¹⁹⁰ Especially since the early 1980s, Saudi Arabia has continued to place a strong emphasis on upgrading its counter-terrorism capabilities. With this in aim, Saudi security officials continue to cooperate with Western security agencies on information exchange and training programmes. At the same time, in August 1988, the Ulema, the nation's highest judicial authority, issued a religious decree declaring sabotage, including aircraft hijacking and airplane bombing, as a major crime punishable by death.¹⁹¹ The Saudi Government's concern regarding international terrorism deepened in the face of continued attacks from Iran and new threats from Iraq at the onset of Gulf crisis. In March 1990, the Saudis took steps to identify illegal residents and

¹⁸⁹ U.S. Department of State, Patterns of Global Terrorism: 1988, PP. 11-12

¹⁹⁰ Leroy Thompson, *op.cit*, PP. 161-162

¹⁹¹ U.S. Department of State, Patterns of Global Terrorism: 1988, P. 17

to either regularize their status or deport them.¹⁹² This process was accelerated during the Gulf crisis.

III-3-6. Closing Remarks

Terrorism has been a prominent feature of politics of the Middle East, and large scale atrocities have been committed in pursuit of some political, religious or other ideological goal. Aviation terrorism has its place among the means employed by the Middle Eastern terrorists groups. Whatever the underlying motives, the targets of Middle Eastern terrorists are in part predictable. The groups consider Israel to be their archenemy and the Western governments to be satanic regimes. Because some of the Middle Eastern terrorist groups have chosen civil aviation as one of their targets, the airlines of these states are put at a considerably higher level of risk. Judging from previous experience, many incidents have involved the release of imprisoned terrorists. This suggest that any states which detain Middle Eastern terrorists in prison are in a potential state of threat. For example, Kuwaiti airlines did not attract particular attention prior to 1982. After the Kuwaiti government had 17 members of the Hezbollah sentenced and jailed for the attacks on the U.S. and the French installations, the airline became a target. In this respect, the international community must keep track of political developments in order to foresee possible danger and to tackle the problem. Without this effort, democratic states will remain a vulnerable target to terrorist attacks because of their open societies and ease of movement across and within their frontiers. In particular, West European, African and Asian states are at high risk from aviation terrorism spilling over from the Middle East.

¹⁹² U.S. Department of State, Patterns of Global Terrorism: 1990, P. 29-31

III-4. The Former Soviet Union and Eastern Europe

III-4-1. Soviet Union

The scope and nature of aviation terrorism in the former Soviet Union is still obscure because it has been fundamentally secret or covert up to now. The acts of violence against civil aviation in the Soviet Union were played down, mainly because such spectacular incidents on newspaper front pages might inspire further attempts. It had long been government policy in the former Soviet Union to give brief, contemptuous, back-page treatment, or more normally no publicity at all to all acts of violence with political overtones so as not to put ideas into the heads of politically disenchanted individuals who might be stimulated by the efforts of others to duplicate such acts. The abbreviated accounts of aircraft hijackings that have filtered down to the public suggest that no one but a fool would attempt the seizure of a Soviet aircraft. There were military guards at Soviet airports and any hijack attempt would be followed by retribution at its most severe.¹⁹³ However, it seemed that none of these factors discouraged acts of violence against the Soviet civil aviation. It is clear that the Soviet Union experienced substantial aviation terrorism. It was reported that 27 Soviet civil aviation aircraft were hijacked in 1990 alone, mainly by youths seeking asylum in Western European states.¹⁹⁴

The first confirmed aircraft hijacking incident in the Soviet Union occurred August 21, 1960, when a man and a woman attempted to hijack a domestic flight

¹⁹³ James A. Arey, The Sky Pirates, London: Ian Allan, 1973, PP. 191-192

¹⁹⁴ U.S. Department of State, Patterns of Global Terrorism: 1990, P. 13

but were overpowered by crew members.¹⁹⁵ Since then, Soviet civil aviation has been exposed to similar attacks. The following Table III-4 shows the extent of aircraft hijacking in the former Soviet Union.¹⁹⁶

Table III-4

**Aircraft Hijacking in the Soviet Union
(1960-1990)**

Year	No. of Incidents
1960-1964	2
1965-1969	1
1970-1974	6
1975-1979	5
1980-1984	5
1985-1989	8
1990	27
Total	54

In the early years, the Soviet Union did not show much concern for aviation terrorism because it had not suffered from serious threat of such attack. The Soviet Union did not take part in the 1963 Tokyo Convention. However, in 1970, it showed an interest in the subject and took part in the conference proceedings at the Hague. It was obvious that this change of attitude demanding strong action against aviation terrorism was, in fact, derived from the fact that the Soviet Union had suffered three such incidents before the Hague Conference.¹⁹⁷ In the early 1970s, there were several aircraft hijacking incidents which led the Soviet Union to introduce domestic measures against such attacks.

¹⁹⁵ Edward F. Mickolus, op.cit, P. 52

¹⁹⁶ Data are drawn from Narrative Report and U.S. Department of Transportation, FAA, Criminal Acts Involving Civil Aviation: 1986-1990

¹⁹⁷ The New York Times, October 16, 1970.

One of the serious incidents during this period occurred on October 15, 1970, when an Aeroflot aircraft with 52 people was hijacked to Turkey by a Lithuanian truck driver and his son. The hijackers surrendered to the Turkish authorities and requested political asylum. The Soviet authorities immediately demanded extradition of the hijackers, but the Turkish government refused the Soviet request by saying that the two states had no extradition agreement and that Turkey considered this a political crime, for which extradition does not apply.¹⁹⁸ After the incident the Soviet Union announced the institution of a new security policy, in which two thousand armed guards would be assigned to travel on Soviet aircraft flying near Soviet borders or from airports from which an aircraft might be hijacked. Another five hundred detectives would be posted at airports to check passengers and luggage before boarding.¹⁹⁹ In addition, during the meeting of the United Nations in 1970, the Soviet official strongly emphasized the urgent need to stop aircraft hijacking, and to regard such acts as serious criminal offences.²⁰⁰ In this narrow frame of reference, the Soviet Union was trying to refuse political recognition of individuals involved in attacks against Soviet civil aviation.²⁰¹ Domestically, with the recognition of the threat of attack against civil aviation in the early 1970s, the Soviet Union introduced several steps to protect itself from aviation terrorism. A Decree of the

198 Edward F. Mickolus, op.cit, PP. 225-226; James A. Arey, op.cit, PP. 194-195

199 Ibid, P. 226

200 U.N. General Assembly, 25th Session, 1914th Plenary Meeting, September 15 - December 17, 1970

201 Roberta Goren, The Soviet Union and Terrorism, London: George Allen & Unwin, 1984, P. 43

Praesidium was enacted on January 3, 1973. It provided a penalty of three to ten years for aircraft hijacking, up to fifteen years if a threat of violence existed or accident resulted, and fifteen years or death if death or serious injury resulted.²⁰² Two months later in March 1973, the Principles of Criminal Legislation of the USSR and the Union Republics were revised to include aircraft hijacking.²⁰³ At the same time, the Soviet Union signed anti-hijacking agreements with Iran in August 1973 and Finland in August 1974. The agreements emphasized the return of the hijackers and the political defense was ruled out regardless of what the motives of hijackers might be.²⁰⁴

In spite of these efforts against aviation terrorism at an early stage, the former Soviet Union was a frequent victim of aviation terrorism. One of the most serious incidents occurred December 2, 1988, when four armed Soviet gangsters hijacked an Aeroflot flight to Israel. According to the official Soviet account, the hijack drama had begun on December 1, 1988, when the gang commandeered a busload of Soviet school children at gun point near the city of Ordzhonikidze, in the Caucasus Mountains. The gang and their hostages then drove to an airport near the town Mineralnye Vody, about 750 miles south of Moscow, where they entered into 22 hours of negotiations with the authorities. The gang threatened to kill the children and their teachers unless they were given an aircraft and allowed to fly out of the Soviet Union. At the same time, they demanded a more than \$2 million ransom in cash. According to the Soviet Foreign Ministry, a plane was

202 Current Digest of the Soviet Press, Vol. 25, No. 1, 1973, P. 7

203 Current Digest of the Soviet Press, Vol. 25, No. 18 and 19

204 Alona E. Evans and John F. Murphy, Legal Aspects of International Terrorism, Massachusetts: Lexington Books, 1978, P. 25

provided in order to save children's lives.²⁰⁵ The Soviet Union's policy had always been to refuse any negotiations with hijackers. Usually special anti-terrorist forces have been employed to bring about a conclusion to aircraft hijackings. On this occasion, the Soviet Union acquiesced to the hijackers' demand for an aircraft and no attempt was made to stop the aircraft from taking off. In fact, the Soviet Union had come under public criticism in March 8, 1988, when nine people died, including five hijackers, and 20 people were injured, in the storming of a hijacked aircraft by anti-terrorists troops. The death toll raised questions in the Soviet media over the authorities' handling of the hijack incident.²⁰⁶ The hijackers had originally asked to go to any one of the noncommunist states, including Pakistan, Iraq, and South Africa as well as Israel, that did not have an extradition treaty with the Soviet Union. The Soviet Union decided to ask the Israeli authorities to allow the hijacked aircraft to land, because Israel, with the strong stand against international terrorism, was considered to be the state most likely to hand back the hijackers, especially at a time when it was anxious to improve relations with the Soviet Union and see diplomatic relations restored.²⁰⁷ Meanwhile, the Israelis decided to allow the aircraft to land because of the great possibility that the hijackers might be Jewish refusnik.²⁰⁸ An Israeli fighter aircraft shadowed the hijacked aircraft when it was in Israeli airspace. Hundreds of Israeli troops were at a military airfield outside Tel Aviv when the aircraft landed. The hijackers, believing that they could not

²⁰⁵ The Times, December 3, 1988

²⁰⁶ Facts on File, May 13, 1988, P. 348

²⁰⁷ The Independent, December 3, 1988

²⁰⁸ Facts on File, December 9, 1988, P. 905

be extradited, surrendered and released the flight crew, about 10 minutes after landing. The Israeli Defence Minister, Mr. Yitzhak Rabin, stated that Israel was suspicious about the hijackers' motive, and he made it clear that there was no question of them being sent back to the Soviet Union until Israel had been given some satisfactory answers. Under Israeli law the hijackers could face charges which carry long terms of imprisonment, and there would be no need to hand them over if any questions remained unanswered about the affair.²⁰⁹

After interrogation of the hijackers, it was obvious that the hijackers had assumed they would be granted automatic asylum simply because they had escaped from the Soviet Union. At the same time, the Soviet Union, which has taken a strong line against international terrorism since Gorbachev's accession to power, asked for the return of the hijackers, and the Israeli authorities recognized that this might enable Israel to seize the opportunity to unblock some of the diplomatic channels which had prevented normal relations between two states.²¹⁰ Consequently, the Israeli government decided to send the hijackers back to the Soviet Union, reportedly after extracting a promise that they would not be sentenced to death.²¹¹ The leader of the hijackers, Pavel Yakshiyants, was sentenced to 15 years in prison, and three others were each given 14-year prison sentence. A fifth man who had helped to plot the hijack but had not taken part was given a three-year prison sentence.²¹² According to the report of the Times, Israel's swift return of the Soviet hijackers was frequently cited by the Soviet

²⁰⁹ The Times, December 3, 1988

²¹⁰ The Times, December 5, 1988

²¹¹ Ibid

²¹² Keesing's Record of World Event, March 1989, P. 36532

government as a good example of the way in which such attacks should be treated.²¹³

In the turmoil of 1990, when the former Soviet Union was falling apart as a result of economic, political and nationalist pressures, violence against civil aviation in the Soviet Union dramatically increased. In that year, Soviet aircraft were involved in 27 hijacking incidents. The motivation behind the hijackings, in most cases, was a desire to escape from the Soviet Union. All of the hijackers who landed in the Soviet Union were arrested by Soviet authorities. The hijackers who succeed to divert aircraft out of the state were also arrested by the authorities of the state in which they landed and most of them were returned to the Soviet Union.²¹⁴

The recent upturn in the number of attack against civil aviation in the Soviet Union illustrates that political and social turmoil resulting from the disintegration process of multi-national states like Yugoslavia has wide ranging implications for aviation terrorism. This might be a major factor in future threat against civil aviation in this region.

III-4-2. Eastern Europe

III-4-2-1. The Early Years

As the Iron Curtain was created in Eastern Europe after the Second World War, acts of violence against civil aviation occurred behind it. Aviation

²¹³ The Times, December 5, 1988

²¹⁴ U.S. Department of Transportation, FAA, Criminal Acts Against Civil Aviation: 1990, P. 16

terrorism in this region originated from the social, economic and political turmoil. In Eastern Europe, aircraft hijacking remained a simple means of transportation. The object of such acts has always been identical, political asylum. In fact, there was no aircraft hijacking for extortion. The fact that aircraft have the capacity of crossing a hostile border has attracted people who were under persecution in this region. The first recorded attack against civil aviation in Eastern Europe took place on July 25, 1947, when three Rumanian army officers hijacked a Rumanian civilian aircraft and forced the crew members to fly to Turkey where the hijackers requested political asylum.²¹⁵ Since then East European states have frequently suffered from attacks against civil aviation which reflected a disturbed social and political climate. Resulting from political turmoil in Eastern Europe, there were 18 aircraft hijacking incidents from 1947 to 1953.²¹⁶ All of the hijackings except three, the objective of which are unknown, were committed by persons trying to escape from the Soviet sphere of influence. The Table III-5 in the following page demonstrates the early development of this type of aircraft hijacking.²¹⁷

²¹⁵ Edward F. Mickolus, *op.cit*, P. 22

²¹⁶ Narrative Report, *op.cit*

²¹⁷ Data are drawn from Narrative Report

Table III-5

Aircraft Hijacking in Eastern Europe (1947-1969)

Date	Airline Nationality	Destination	Objective
06/25/1947	Rumanian	Turkey	Political Asylum
04/06/1948	Czechoslovakian	Germany	Political Asylum
05/04/1948	Czechoslovakian	Germany	Political Asylum
06/04/1948	Yugoslavian	Italy	Political Asylum
06/17/1948	Rumanian	Austria	Political Asylum
06/30/1948	Bulgarian	Turkey	Political Asylum
01/04/1949	Hungarian	Germany	Political Asylum
04/29/1949	Rumanian	Greece	Political Asylum
09/16/1949	Polish	Sweden	Political Asylum
12/09/1949	Rumanian	Yugoslavia	Unknown
12/16/1949	Polish	Denmark	Political Asylum
03/24/1950	Czechoslovakian	Germany	Political Asylum
03/24/1950	Czechoslovakian	Germany	Political Asylum
03/24/1950	Czechoslovakian	Germany	Political Asylum
08/11/1950	Czechoslovakian	Germany	Political Asylum
10/17/1951	Yugoslavian	Switzerland	Political Asylum
06/26/1952	Yugoslavian	Italy	Political Asylum
03/23/1953	Czechoslovakian	Germany	Political Asylum
07/13/1956	Hungarian	Germany	Political Asylum
06/02/1958	Czechoslovakian	Austria	Unknown
07/08/1959	Yugoslavian	Italy	Unknown
10/19/1969	Polish	Germany	Political Asylum
11/20/1969	Polish	Austria	Political Asylum

In the early stage, such incidents usually involved complicity between the crew members and a group of friends. For instance, on April 6, 1948, seventeen people, including the pilot and two crew members, seized and flew a Czechoslovakian domestic aircraft to the U.S. Zone of Germany, where they requested political asylum.²¹⁸ Another such incident occurred on October 17, 1951, when a Yugoslavian Airlines plane was hijacked to Zurich by the pilot and copilot who requested political asylum for themselves and their families. The hijacker claimed that they were no longer able to endure the regime of

²¹⁸ Edward F. Mickolus, *op.cit.*, P. 25

communist terror.²¹⁹ The most significant aircraft hijacking incident, involving eight crew and sixteen passengers in the plot, who feared persecution because of their previous service in the RAF and their Roman Catholic religious beliefs, occurred on March 24, 1950, when three Czechoslovakian aircraft were hijacked to the U.S. Zone of Germany. On landing in the U.S. Zone of Germany, all the hijackers and passengers were welcomed and treated as guests by U.S. Air Force. The U.S. government rejected Czechoslovakia's demand for extradition and dismissed allegations of ill treatment of the passengers.²²⁰ In the early stages, hijackers were usually granted political asylum and no punishment was meted out. One writer described this situation as follows: "The fact that crew and passengers were killed in the course of some of the incidents was of minor interest to a public more inclined to regard the hijackers as heroic freedom fighters".²²¹ This tendency, in fact, may have encouraged hijacking from the Eastern states to the Western states.

After the initial peak of aircraft hijackings in Eastern European states, their occurrence in flights from Rumania, Czechoslovakia, Poland, Yugoslavia, and Hungary, was contained until the late 1960s. There were only 5 such recorded incidents from 1954 to 1969. This downward trend in the number of such incidents reflected the intensified political security measures, including travel restrictions, imposed after the Hungarian uprising of 1956.²²² Since 1970, the

²¹⁹ Ibid, P. 31

²²⁰ Ibid, P. 29

²²¹ Robert G. Bell, "The U.S. Response To Terrorism Against International Civil Aviation, ORBIS, Vol. 19, No. 3-4, 1975, P. 1330

²²² See generally, David Thomson, Europe Since Napoleon, Middlesex: Penguin Books, 1985; Patrick Brogan, Eastern Europe, 1939-1989: The Fifty

majority of aviation terrorism incidents in Eastern Europe have occurred in Czechoslovakia and Poland.

III-4-2-2. Czechoslovakia

In the beginning of 1970s, after a long period of inactivity, attacks against civil aviation occurred once more, largely in Czechoslovakia. The main motivation for aircraft hijacking was the seeking of political asylum. The upward trend reflected the social and political situation. The following Table III-6 illustrates this development.²²³

Table III-6

Czechoslovakian Aircraft Hijacking (1970-1990)

Date	Destination	Objective
05/05/1970	Austria	Political Asylum
06/08/1970	West Germany	Political Asylum
08/08/1970	Austria	Political Asylum
12/10/1970	Unknown	Unknown
04/18/1972	West Germany	Political Asylum
06/08/1972	West Germany	Political Asylum
10/28/1976	West Germany	Unknown
10/11/1977	France	Political Asylum
02/06/1978	West Germany	Political Asylum
05/10/1978	West Germany	Political Asylum
05/17/1978	Unknown	Unknown
05/29/1978	West Germany	Unknown
02/18/1983	Unknown	Unknown
05/26/1989	Undefined, Western Europe	Unknown

Years War, London: Bloomsbury Publishing Ltd, 1990; Geoffrey Hosking, A History of the Soviet Union, London: Fontana Press, 1985

²²³ Data are drawn from Narrative Report and U.S. Department of Transportation, Criminal Acts Involving Civil Aviation: 1986-1990

Meanwhile, in the late 1960s, a significant event occurred in Czechoslovakia, known as the Prague Spring, which might explain the reappearance of Czechoslovakian aircraft hijackings after a long period of inactivity. In 1968, Alexander Dubcek and other Communist intellectuals tried to reform their State's economic and political structures.²²⁴ The reform movement arose from the unique circumstances existing in Czechoslovakia, the most westernized and industrialized state to fall under communism, and the only functioning democracy in Eastern Europe before the second World War. The initial impetus for reform was the economic stagnation of the early 1960s. Additional pressure for reform manifested in the demands for rehabilitation of those punished in the Soviet-instigated purges of the 1950s and for a freer cultural life.²²⁵ This was greeted with great suspicion elsewhere in the Eastern bloc. The Soviet Union led a Warsaw Pact invasion of Czechoslovakia, in August 21 1968, to prevent continued deviation from the Communist norm, and to install an acceptable pro-Soviet regime in power.²²⁶ As a result of the invasion, a third of the communist party's members were expelled from the party. It was also reported that more than 2000 Czechoslovakian people left their state after the Soviet occupation.²²⁷ This turmoil extended to the first anniversary of the invasion, in August 1969. Huge demonstrations in Prague were broken up by police with great brutality.

224 Keesing's Contemporary Archives, May 25-June 1, 1968, PP. 22711-22716, August 31-September 7, 1968, PP. 22885-22896

225 Barbara P. McCrea, Jack C. Plano, and George Klein, The Soviet and East European Political Dictionary, California: ABC Clio Information Services, 1984, PP. 295-296; Geoffrey Hosking, op.cit, PP. 368-372

226 Keesing's Contemporary Archives, September 14-21, 1968, PP. 22909-22917

227 Ibid

Tanks patrolled the city, and the government proclaimed emergency laws suspending all civil rights and giving the police extreme powers. In the disturbances, five people were killed by the police and more than 1,300 people were arrested.²²⁸

In this political situation in Czechoslovakia, people who wanted to escape from their state, attempted to exploit aircraft hijacking as one of their getaway methods. On June 8, 1970, eight armed hijackers seized a Czechoslovakian internal flight and forced the pilot to fly to West Germany. The hijackers asked for political asylum, saying that they could not tolerate economic and political conditions in Czechoslovakia.²²⁹ However, on September 16, 1970, prison sentences ranging from eight months to two and half years were passed on the eight hijackers. Later, only the three main offenders were actually sent to prison.²³⁰ Another Czechoslovakian domestic aircraft, flying from Prague to Kosice with 27 passengers, was hijacked by a Czechoslovakian army officer, Colonel Vladimir Rehak, and his two sons on August 8, 1970 and diverted to Vienna, where they asked for political asylum.²³¹ Colonel Rehak stated that he had been a supporter of Dubcek's liberal reforms before the Warsaw Pact invasion of Czechoslovakia, that a special commission had been set up to investigate his alleged counter-revolutionary activities, and that he had decided to escape to the West with his sons.²³² These hijackers were also sentenced by

²²⁸ Keesing's Contemporary Archives, October 4-11, 1969, P. 23594

²²⁹ Keesing's Contemporary Archives, February 20-27, 1971, P. 24460

²³⁰ Ibid

²³¹ Ibid

²³² Ibid

an Austrian court on February 17, 1971, for unlawful seizure of an aircraft, infringing the personal liberty of the passengers, and illegal possession of a weapon. At the same time, the hijackers were ordered to be deported from Austria at the expiration of their sentences, but were told they would not be sent back to Czechoslovakia, although Rehak pleaded not guilty to the charges brought against him, adducing political persecution as his motive for seizing the aircraft.²³³

In the early stages, most of the hijackers from Eastern bloc states were welcomed. However, from the early 1970s, the response of the Western states was in contrast to that which appertained to earlier hijackings. This tendency derived from an understanding of the growing threat of such incidents. In spite of the various means of dealing with aviation terrorism by Western states, aircraft hijackings by Czechoslovakians have been committed sporadically due to the unstable social and political situation. A particularly interesting incident occurred on October 28, 1976, when a Czechoslovakian domestic aircraft was hijacked to West Germany where the hijacker surrendered. The Czechoslovakian authorities requested the return of the hijacker who had been taken to prison, claiming that he was sought for the murder of his brother. The West Germans refused Czechoslovakia's request because of the absence of an extradition treaty with Czechoslovakia.²³⁴ Another similar incident occurred on October 11, 1977, when a Czechoslovakian airliner was hijacked by two hijackers to Frankfurt where they surrendered and requested political asylum.²³⁵ According to the Czechoslovakian news agency, one of the hijackers faced

233 Ibid

234 Edward F. Mickolus, *op.cit.*, P. 658

235 Ibid, P. 734

charges at home of failure to pay alimony.²³⁶ Like previous incidents, the hijackers were sentenced for endangering airline transportation.²³⁷

After the upward trends of hijacking in Czechoslovakia during 1970s, such incidents have been contained up to now. Since 1980, only two attempted hijackings have been recorded.

III-4-2-3. Poland

As in Czechoslovakia, the reappearance of aircraft hijacking in the early 1970s was deeply involved with the social and political turmoil. According to Brunon Holyst, Director of the Institute of Crime Problems, in Warsaw, Poland, there was a total of 20 attacks against aircraft during 1970 in Poland.²³⁸ This abrupt upward tendency, in part, originated from the socio-political situation. The following Table III-7 shows the development of Polish airline hijackings. From the late 1960s to the early 1970s, the social situation deteriorated and became more aggravated by the political situation. The Polish people were enraged by price fluctuations and the methods of conducting the administration by the political bureau of the United Polish Worker's Party. This was a time of general instability with strikes and demands for urgent change in economic and political structure.²³⁹ Under this situation in Poland, discontented people resorted to

236 Ibid

237 Ibid

238 Brunon Holyst, "The Abduction of Polish Airlines "LOT" Planes", Violence, Aggression and Terrorism, Vol. 3, No. 1, 1989, P. 123

239 Patrick Brogan, op.cit, PP. 55-58

aircraft hijacking as one of their getaway methods from their state. On June 5, 1970, a Polish domestic airliner, flying from Warsaw to Gdynia with 23 passengers, was hijacked by a man, armed with grenades. The hijacker, who asked for political asylum, forced the pilot to fly to Copenhagen where he was taken into custody by the Danish authorities and charged with unlawful detention of an aeroplane, endangering public transport and causing danger to the lives of others.²⁴⁰ Another Polish domestic airliner was hijacked by five men to the Danish island of Bornholm on August 19, 1970. The hijackers also requested political asylum.²⁴¹ After the peak of hijacking in the early 1970s, such incidents were contained until 1980. From 1971 to 1980, only five Polish aircraft hijackings were recorded. The Table III-7 in the following page shows this development.²⁴²

²⁴⁰ Keesing's Contemporary Archives, February 20-27, 1971, P. 24460

²⁴¹ Ibid

²⁴² Data are drawn from Narrative Report and U.S. Department of Transportation, FAA, Criminal Acts Involving Civil Aviation: 1986-1990

Table III-7

**Polish Aircraft Hijackings
(1970-1990)**

Date	Destination	Objective
06/05/1970	Denmark	Political Asylum
06/09/1970	Unknown	Unknown
08/07/1970	West Germany	Unknown
08/19/1970	Denmark	Political Asylum
08/26/1970	Austria	Unknown
11/04/1976	Austria	Unknown
04/24/1977	Unknown	Unknown
10/18/1977	Austria	Unknown
08/30/1978	West Germany	Political Asylum
12/04/1980	West Germany	Political Asylum
01/10/1981	Western Europe	Political Asylum
07/21/1981	West Germany	Political Asylum
08/05/1981	West Germany	Unknown
08/11/1981	West Germany	Political Asylum
08/22/1981	West Germany	Political Asylum
09/18/1981	West Germany	Political Asylum
09/22/1981	West Germany	Political Asylum
09/29/1981	West Germany	Unknown
04/30/1982	West Germany	Political Asylum
06/09/1982	West Germany	Unknown
07/24/1982	Unknown	Unknown
08/25/1982	West Germany	Political Asylum
11/22/1982	West Germany	Political Asylum
08/28/1986	Unknown	Unknown
05/15/1987	West Germany	Unknown
09/08/1987	Unknown	Unknown

The political situation in Poland had become more unstable in the 1980s. By the mid-1970s, the Polish economy had been increasingly impoverished by the increase in oil prices and a worsening world economy. The food prices were being boosted to the sky, yet wages remained frozen. In this wretched economic situation, the discontented Polish workers under the leadership of Lech Walesa, with the full support of intellectuals in Eastern Europe, demanded the reform of the Polish economic and political systems.²⁴³ As the Polish government lost

²⁴³ Keesing's Contemporary Archives, February 20, 1981, PP. 30717-30721

control over the state, a state of martial law was imposed on December 13, 1981. During the following five months, more than 10,000 people were arrested by the police.²⁴⁴ This turmoil in Poland continued until the late 1980s.

In part this political situation was the cause of the outbreak of aircraft hijacking in 1980s. Under the persecution, large numbers of Polish people continued to leave Poland by unofficial means, either by defection while visiting foreign states or by more direct means such as diverting aircraft to Western democratic states. The discontented Polish people used aircraft hijacking as a means of escape from their state. For example, on August 22, 1981, a Polish airline, LOT, domestic flight was hijacked by a Polish male, armed with a dummy hand grenade, to West Berlin's Tempelhof airport. The hijacker, who asked for political asylum, claimed that he was banned by the government from leaving the state after an abortive attempt to reach the West via third states in 1979, and that he was a Solidarity messenger and had acted as a steward at demonstrations, where he had been photographed by the security police.²⁴⁵ Despite his claims of political persecution, on January 19, 1982, he was sentenced to five and half years by German court.²⁴⁶ Another such interesting incident occurred on September 18, 1981, when twelve Polish students, including three female students, hijacked a LOT aircraft and diverted it to West Berlin, where they asked for political asylum.²⁴⁷ According to Brunon Holyst, a

²⁴⁴ Keesing's Contemporary Archives, October 8, 1982, PP. 31733-31742

²⁴⁵ Edward F. Mickolus, Todd Sandler, and Jean M. Murdock, *op.cit*, PP. 187-188

²⁴⁶ *Ibid*, P. 188

²⁴⁷ *Ibid*, P. 199

total of 8 criminal attacks against civil aircraft took place during 1981. This figure shows a great increase in such incidents compared with previous years. During 1980, there was only one such incident. This upward trend of attacks made the Polish government take counter-measures. On May 27, 1982, Poland's News Agency, PAP, reported that, in order to forestall further hijackings, security guards on all LOT domestic flights were in future to carry firearms.²⁴⁸ It was subsequently reported on July 24, 1982, that an attempt by 11 people to hijack a Polish airliner had failed.²⁴⁹ However, this was not a complete solution, with five hijackings occurring in 1983, two in 1984, 3 in 1986, and 6 in 1987²⁵⁰

III-4-3. The Responses of the Soviet Union and Eastern European States

The Soviet attitude toward acts of violence against civil aviation during the 1960s and 1970s was largely negative. They regarded international terrorism as legitimate when applied by national liberation movements, at least if it was directed against the Western states. However, from the early 1980s, there was a Soviet hard line policy toward terrorism. The Soviet Union recognized, with the increase of international terrorism against Soviet targets, that terrorism did more harm than good. Consequently the Soviet authorities concluded that the Soviet Union could benefit from international cooperation against international terrorism.

²⁴⁸ Keesing's Contemporary Archives, October 8, 1982, P. 31735

²⁴⁹ Ibid

²⁵⁰ Brunon Holyst, *op.cit*, P. 123

In recent years, the Soviet Union increased its efforts to combat domestic and international terrorism, both of which have become of increasing concern to the Soviet authorities. In 1990 alone, it was reported that Soviet nationals attempted at least 27 aircraft hijackings.²⁵¹ In general, Soviet authorities have made vigorous attempts to investigate such incidents and to prosecute the individuals involved. The Soviet Union requested and obtained the extradition of several hijackers, and several other extradition requests are pending.²⁵² Israel's swift return of the hijackers of a Soviet aircraft in 1988 was repeatedly cited by Soviet media as an example of the way in which hijacking incidents should be treated.²⁵³ In addition, Soviet authorities continue to participate in bilateral exchanges with the United States and several West European states on a broad range of counter-terrorism issues.²⁵⁴ The agreement on human rights which was signed by the Soviet Union in January 1989 is one of the recent signs of progress toward building an international consensus linking between the former Soviet Union and the West. The agreement contains a provision condemning terrorism as unjustifiable under any circumstances and calls for firmness in response to demands, strengthened international cooperation, tighter national controls over groups that perpetrate acts of terrorism, and extradition or prosecution of persons responsible for terrorism.²⁵⁵ In addition, the Soviet

251 U.S. Department of State, Operation Desert Storm, March 4, 1991, P. 59

252 The Independent, July 6, 1990; The Scotsman, July 2, 6, and 12, 1990

253 The Times, December 5, 1988

254 Ibid, P. 60

255 Martha Crenshaw, Terrorism and East-West Cooperation, Presented to the Joint Annual Convention of the British International Studies Association and International Studies Association, London, March 28-April 1, 1989, P. 5

Union ratified the Montreal Protocol in April 1989, dealing with combatting violence at international airports and has supported efforts within ICAO to further enhance the security of civil aviation.²⁵⁶

The Soviet Union, especially, took an increasingly firm stand against terrorism and expressed a new and specific interest in combatting international terrorism following Mikhail Gorbachev's accession to power. Gorbachev proposed that the development of effective ways of combatting international terrorism be made part of a comprehensive international security system in his speech to the Congress of the Communist Party of the Soviet Union (CPSU) in 1987.²⁵⁷ He also called for the creation of a U.N. body to investigate acts of international terrorism.²⁵⁸ At the same time, the Soviet Union condemned specific international terrorist acts against the West. In response to the September 5, 1986, Pan Am aircraft hijacking at Karachi, Pakistan by the Abu Nidal Organization, which resulted in killing 22 innocent people and injuring 125, the Soviet Union issued the following critical statement:

"No matter what the motives of the people who are committed this evil deed, there is no justifying it... A resolute stop must be put to terrorism of all sorts... These criminal actions must not be allowed to end people's lives, jeopardize the normal course of international relations, severely exacerbate some situation or other, or engender violence".²⁵⁹

²⁵⁶ U.S. Department of State, Patterns of Global Terrorism: 1989, P. 34

²⁵⁷ Ibid

²⁵⁸ Facts on File, October 16, 1987, P. 751

²⁵⁹ P. Demchenko, "There is No Justification for Terrorism", Pravda, September 8, 1986, Reprinted in Current Digest of the Soviet Press, October 8, 1986, P. 17

There are also other signs that the Soviet Union intended to solve the problem of aviation terrorism through international cooperation. In January 1989, following Israeli cooperation with Soviet authorities and the return of hijackers immediately after they had landed in Israel, Soviet authorities expressed KGB willingness to work even with the CIA, the British Intelligence Service, the Israeli Mossad, and other services in the West on this matter.²⁶⁰ While expanding counter-terrorism issues with the West, the Soviet Union continued with their preference for broader, less concrete multilateral efforts against terrorism. This reflected reluctance to take specific actions against state sponsors with whom the regime maintained advantageous diplomatic relations, such as Cuba, North Korea, Libya, and Syria.²⁶¹

Meanwhile, with the increasing threat of violence against civil aviation in the early 1970s, some of the East European states took a hard line policy for combatting aviation terrorism including the formation of special anti-terrorist units. Poland, for example, created an anti-terrorist unit in 1974, called "The Safeguarding Department", under the order of the Prime Minister. This unit performs guard duty over the safety of civil aviation at all airports in the state.²⁶² Despite its efforts terrorist attacks increased, and consequently the Polish authorities introduced the Sky Marshal programme for use on both domestic and international flights in 1981. Although they achieved a deterrent effect, this programme was terminated in 1985 for safety reasons.²⁶³

260 The Washington Post, March 5, 1989

261 U.S. Department of State, Patterns of Global Terrorism: 1990, P. 14

262 Brunon Holyst, op.cit, PP. 129-130

263 Ibid, P. 130

As East European governments have recognized that those measures, mentioned above, are temporary, they have gradually turned their efforts for combatting aviation terrorism to active cooperation with the West. However, it is important to note that until late 1980, East European governments continued to maintain close relations with various terrorist organizations including the PLO and provided direct or indirect support to them. Such support usually was given under the pretext of aiding "national liberation movements" and ranged from permitting transit for known terrorists to providing arms, explosives, training, funding, safehaven, and political encouragement.²⁶⁴ Poland, for example, had permitted the Abu Nidal organization to operate trading offices from their territory for several years until, in the face of international concern, they closed them down in 1987.²⁶⁵ In addition, Czechoslovakia and Bulgaria condoned terrorism by directly or indirectly supporting North Korea against charges of responsibility for the destruction of KAL 858 in November 1987.²⁶⁶

In recent years, however, with the realization that they are also equally exposed and vulnerable to aviation terrorism, governments in this region have changed their approach to terrorism. In 1987, Bulgaria sponsored an international conference on terrorism and supported work on counter-terrorism by the Balkan foreign ministers at their conference. The conference condemned the hijacking of Kuwait Airways in April 1988.²⁶⁷ In addition, the Bulgarian government ratified the Tokyo Convention in August 1988 and was accepted in

²⁶⁴ U.S. Department of State, Patterns of International Terrorism: 1983-1989

²⁶⁵ U.S. Department of State, Patterns of International Terrorism: 1987, PP. 39-40

²⁶⁶ U.S. Department of State, Patterns of International Terrorism: 1988, P. 48

²⁶⁷ Ibid

that year as a member of INTERPOL, the international police body, which should allow for greater cooperation on counter-terrorism.²⁶⁸ Since the fall of their Communist regimes in 1989, the policy of many East European states has dramatically shifted from tolerance of, or even support for, terrorist organizations to active cooperation with the Western states on counter-terrorism issues. For example, in March 1990, Czechoslovak President Vaclav Havel revealed that the former Communist government had exported 1,000 tons of Semtex explosive to Libya.²⁶⁹ This was the first official acknowledgement that sales of such magnitude had taken place. Meanwhile, Yugoslavia has continued to take a more active stance against international terrorism in recent years. The Yugoslav government condemned terrorist action and has played a positive role within the United Nations. In addition, Yugoslav security services have cooperated actively in international terrorist investigations.²⁷⁰ This new approach suggest there is a real possibility of building an international consensus. The changing policy against terrorism in East European states is due in part to a growing recognition that international terrorism including attacks against civil aviation represents a danger to themselves. Yugoslavia had long suffered from sporadic and generally minor outbreaks of terrorism by extremist emigre groups hostile to the Communist regime. Although there were no significant domestic terrorist attacks against civil aviation in recent years, offices of Yugoslav Airlines in Brussels and Sydney suffered from bomb attacks. At the same time, it is important to note that a new development in Yugoslavia has been the appearance of armed groups, often connected with tensions that are rampant

²⁶⁸ U.S. Department of State, Patterns of International Terrorism: 1989, P. 35

²⁶⁹ The Daily Telegraph, March 23, 1990

²⁷⁰ U.S. Department of State, Patterns of Global Terrorism: 1990, P. 17

among the various national groups in the state. This development poses a potential threat to civil aviation.

III-4-4. Closing Remarks

The problem of aviation security in this region is that many airports do not adopt the necessary security measures. In some airports, there is a limitation in the use of electronic detectors to check out passengers and luggage because of inappropriate airport construction. In addition to the lack of high-technological security equipment, the security equipment is outdated, in most cases, or not in full working order due to its long period of use and lack of proper maintenance.²⁷¹ One of the major difficulties in providing adequate security measures appears to be the expense involved. The liquidity difficulties and the poor supply of hard currency, in fact, prevented investment in high technology, as in the Third World states.

So far, acts of violence against civil aviation have not become a great problem in the newly democratised states of Eastern Europe. However, democratization, the concomitant loosening of governmental control over society, and the resulting changes in government security structures may make some of the states of the region more vulnerable to the domestic threat of aviation terrorism. In addition, the disintegration of multi-national states in the former Soviet Union and Yugoslavia have wider ranging implications for civil aviation security. It is also important to note that new threats are stemming from the eruption of ethnic conflicts in the former Soviet Union. Under the political and social turmoil, there is one certainty, and that is that the high profile civil

²⁷¹ Brunon Holyst, *op.cit*, PP. 131-132

aviation industry will be in the frontline. Furthermore, many airports in this region lack the resources to provide an effective security system. This suggests that aircraft hijacking and other forms of attack may increase in scale in the near future owing to the increase in international air transportation in this region. These trends are not only limited to the East European states. The following sections also examine the problems of aviation terrorism in other regions.

III-5. Asian States

III-5-1. The Early Years

In the early stages, most of the significant attacks against civil aviation were committed by people who were seeking political asylum in Western states. Besides these early incidents of seeking political refuge, there were three cases of a different nature which occurred in Asian states. The first attack against civil aviation in Asia occurred on July 16, 1948, when a Cathay Pacific Catalina, flying from Macao to Hongkong, was hijacked by a group of Chinese criminals. Wong Io, the leader of the hijacking plot, had originally planned to land the aircraft in the Pearl River estuary and hold the crew members and passengers to ransom. However, the plot did not succeed, as the crew members resisted. As a result of the clash between the crew members and hijackers, the pilot was killed. Then the aircraft crashed into the sea despite the fact that one of the hijackers, who was an experienced pilot, had attempted to regain control of it. All on board were killed, except one of the hijackers.²⁷² This was the first instance of a

²⁷² Edward F. Mickolus, *op.cit.*, PP. 26-27

criminally motivated hijacking in the history of aviation, and also the first airliner to crash as a consequence of aircraft hijacking.

The first sabotage bomb attack against civil aircraft in flight also occurred in Asia on May 7, 1949, when a Philippine Air Lines aircraft crashed into the sea between Daet and Manila, with no survivors among the thirteen people on board. A time bomb had been planted on the aircraft by two ex-convicts who were hired by a man and woman who were attempting to kill the woman's husband who was a passenger.²⁷³ This was the beginning of the most serious attacks against civil aircraft in aviation history. The first incident, in history, of a criminal aircraft hijacking perpetrated by a fugitive from the law also occurred in Asia. On December 30, 1952, a wanted criminal hijacked a Philippine Air Lines aircraft to Amoy in the People's Republic of China. However, just before the plane was about to land at Amoy, it was intercepted and forced to land on the Nationalist-held island of Quemy, four miles from Amoy, by a fighter aircraft of the Nationalist Chinese Air Force, which risked being shot down by anti-aircraft bursts from the Communists.²⁷⁴ The following Table III-8 below shows the development of attacks against civil aircraft in Asian states in the early stages.²⁷⁵

²⁷³ Ibid, P. 28

²⁷⁴ Ibid, P. 33

²⁷⁵ Data are compiled from U.S. Department of Transportation, FAA, Aircraft Hijackings and Other Criminal Acts Against Civil Aviation Statistical and Narrative Report: Updated to January 1, 1986; Edward F. Mickolus, Transnational Terrorism: A Chronology of Events, 1968-1979, London: Aldwych Press, 1980; Keesing's Contemporary Archives

Table III-8

**Aviation Terrorism in Asia
(1948-1969)**

Date	Type of Attack	Airline Nationality	Objective or Destination
07/16/1948	Hijacking	Hongkong	Extortion
01/30/1949	Hijacking	Taiwanese	Unknown/China
05/07/1949	Sabotage Bombing	Philippine	To kill husband
12/30/1952	Hijacking	Philippine	Escape from law/China
02/16/1958	Hijacking	South Korean	North Korea
04/10/1958	Hijacking	South Korean	North Korea
11/06/1968	Hijacking	Philippine	Robbery
08/05/1969	Sabotage Bombing	Philippine	Suicide
12/11/1969	Hijacking	South Korean	North Korea
12/22/1969	Sabotage Bombing	Vietnamese	Unknown

Unlike the pattern of events in Eastern Europe and the Middle East, attacks against civil aviation generally possessed a criminal character from the beginning, although in South Korea under the social and political turmoil after the Korean War, communist sympathizers hijacked three Korean National Airlines between 1958 and 1969. Until 1969, hijackings and other forms of attacks against civil aviation were not a serious problem in Asia. However, from the early 1970s, such attacks have posed great problems in Asian states, particularly in Japan and the Philippines. The Table III-9 illustrates the general development of attacks against civil aviation in this region.²⁷⁶

²⁷⁶ Data are drawn from U.S. Department of Transportation, FAA, Aircraft Hijackings and Other Criminal Acts Against Civil Aviation Statistical and Narrative Report; Updated to January 1, 1986; (Significant) Worldwide Criminal Acts Involving Civil Aviation, 1974-1985; and Criminal Acts Against Civil Aviation, 1986-1989

Table III-9

**Aviation Terrorism in Asia
(1970-1990)**

Year	No. of Hijacking	No. of Explosions on Aircraft and Airline Facilities
1970	4	2
1971	4	1
1972	1	2
1973	2	2
1974	7	2
1975	4	5
1976	4	1
1977	8	3
1978	4	2
1979	3	1
1980	2	0
1981	4	0
1982	6	2
1983	3	7
1984	5	4
1985	4	4
1986	1	8
1987	1	5
1988	4	5
1989	3	1
1990	4	0
Total	78	56

III-5-2. Japan

There were no recorded aircraft hijackings or other forms of attack against Japanese airlines until the late 1960s. However, Japanese civil aviation has been exposed to such attacks since 1970. The following Table III-10 shows this development.²⁷⁷

²⁷⁷ Data are compiled from U.S. Department of Transportation, FAA, Aircraft Hijackings and Other Criminal Acts Against Civil Aviation Statistical and

Table III-10

**Japanese Registered Aircraft Hijacking
(1970-1990)**

Date	Airline	Objective/Destination
03/31/1970	Japan Airlines	North Korea
08/19/1970	All Nippon Airways	Suicide
05/13/1971	All Nippon Airways	North Korea
11/06/1972	Japan Airlines	Extortion/Cuba
07/20/1973	Japan Airlines	Prisoner Release
03/12/1974	Japan Airlines	Extortion
11/23/1974	All Nippon Airways	North Korea
04/09/1975	Japan Airlines	Extortion
07/28/1975	All Nippon Airways	Hawaii
01/05/1976	Japan Airlines	Free ride to Tokyo
03/17/1977	All Nippon Airways	Criminal Escape
03/17/1977	All Nippon Airways	Unknown
09/28/1977	Japan Airlines	Prisoner Release/Extortion
11/13/1979	Japan Airlines	USSR

The first incident involving a Japanese aircraft occurred on March 31, 1970, when a Japan Airlines (JAL) aircraft with 7 crew members and 122 passengers was hijacked by nine extremist left-wing students, brandishing Samurai swords and daggers and who were in possession of home-made bombs and demanded to be flown to Pyongyang, North Korea in an attempt to set up a base for "the world-wide revolution".²⁷⁸ The hijackers were identified as members of the Japanese Red Army (JRA), known as Seikigunha, advocating the violent overthrow of the Japanese government and of the existing political system.²⁷⁹

Narrative Report: Updated to January 1, 1986; Edward F. Mickolus, Transnational Terrorism: A Chronology of Events, 1968-1979, London: Aldwych Press, 1980; Keesing's Contemporary Archives; Facts on File; Newspapers

²⁷⁸ The Times, March 31, 1970; Keesing's Contemporary Archives, February 20-27, 1971, P. 24458; Far Eastern Economic Review, 1971 Yearbook, P. 196

²⁷⁹ For further reading concerning Japanese Red Army, see Yoshihiro Kuriyama, "Terrorism at Tel Aviv Airport and a "New Left" Group in Japan",

After refuelling at Fukuoka, where 23 passengers including 12 children and 10 women were released, the hijacked aircraft flew on to North Korea, but just after crossing the 38th parallel changed course and landed at Kimpo International Airport, Seoul, South Korea.²⁸⁰ When the aircraft landed at Seoul, the South Korean authorities did everything possible to disguise the airport and to lead the hijackers to believe that they were in North Korea.²⁸¹ This hoax attempt failed when the hijackers asked for portraits of Kim Il-Sung. The hijackers then threatened to blow up the aircraft if any attempts to end the hijacking were made.²⁸²

During the negotiation at Kimpo International Airport, the hijackers accepted two symbolic hostages, Japanese deputy minister of Transportation, Shinjiro Yamamura and a socialist member of the Japanese Diet, Sukeya Abe, in exchange for the passengers and the aircraft flew to North Korea.²⁸³ The hijackers explained the hijacking as an attempt to express solidarity with North Korea and to draw attention to and to dramatize the economic and political collusion of Japan with the United States, and the South Korean government against both North Korea and oppressed South Koreans.²⁸⁴ In North Korea, the

Asian Survey, Vol. 13, 1973, PP. 336-346; Patricia G. Steinhoff, "Portrait of a Terrorist: An Interview with Kozo Okamoto", Asian Survey, Vol. 16, 1976, PP. 830-833

280 The Times, April 1, 1970

281 Ibid

282 Ibid; Keesing's Contemporary Archives, February 20-27, 1971, P. 24459

283 The Times, April 4, 1970; Keesing's, Ibid; Far Eastern Economic Review, 1971 Yearbook, P. 196

284 Patricia G. Steinhoff, op.cit, P. 831

hijackers were given political asylum by the communist government. At the same time, the North Korean authorities said that the hijackers would not be returned to Japan.²⁸⁵ The aircraft and two symbolic hostages returned to Japan on April 6, 1970.²⁸⁶ This was the first dramatic attack by the Japanese Red Army and after the hijacking this group turned increasingly toward direct attacks.

Prior to this incident which was the longest recorded aircraft hijacking to that date, Japan had neither a defined provision in the Criminal Code to deal with such attacks against civil aviation, nor proper aviation law to guide the commander of the aircraft during the critical situation. However, this incident aroused instant response from the Japanese government which hurriedly adopted the various legislative measures necessary for the suppression of such attacks against civil aviation.²⁸⁷ In addition, Japan proceeded to ratify the Tokyo Convention of 1963 on Offences and Certain Other Acts Committed on Board Aircraft. The Japanese Diet amended relevant national legislation to implement the Tokyo Convention in the domestic sphere.²⁸⁸ Additionally, Japan enacted a law specially governing the unlawful seizure of aircraft, known as Law Concerning Punishment for Unlawful Seizure of Aircraft and Similar Crimes, on May 18, 1970.²⁸⁹

285 The Times, April 5, 1970

286 Keesing's Contemporary Archives, February 20-27, 1971, P. 24459

287 The Times, April 5, 1970

288 Soji Yamamoto, "The Japanese Enactment for the Suppression of Unlawful Seizure of Aircraft and International Law", Japanese Annual of International Law, Vol. 13, 1971, PP. 70-71

289 For further reading concerning Japan's enactment of legislation, see Ibid, PP. 71-80; P. I. R. Abeyratne, "Aerial Piracy and Extended Jurisdiction in Japan", International and Comparative Law Quarterly, Vol. 33, 1984, PP. 603-608

Prior to the JAL aircraft hijacking, the Japanese Customs Authorities did not adopt a strict procedure for the checking of airline passengers because of the principle which they termed "a high regard for human rights".²⁹⁰ However, a great outcry for proper security measures to protect innocent passengers from aviation terrorism arose from the Japanese public at large led by the Japanese press. As a result, the Japanese government enhanced security measures including a check of passengers before they boarded an aircraft.

The next major incident occurred on September 28, 1977, when a Japan Airlines aircraft flying from Paris to Tokyo was hijacked shortly after departing from Bombay by five members of the Japanese Red Army, armed with guns, grenades and plastic explosives. The hijackers forced the pilot to fly to Dacca, Bangladesh, and demanded the release of nine radicals detained in Japanese prisons, along with a \$6 million ransom.²⁹¹ The hijackers also denounced the Japanese Emperor as a war criminal and accused the Japanese government of concealing scandals, such as the Lockheed bribery case.²⁹² During the negotiations, the hijackers threatened to kill the passengers one by one and blow up the aircraft if their demands were not met. The Japanese government surrendered to the hijackers' blackmail, and agreed to provide the ransom and the release of prisoners, which led to an insoluble dilemma.²⁹³ On the one hand,

²⁹⁰ Japan Times, April 3, 1971, cited by P. I. R. Abeyratne, *Ibid*, P. 601

²⁹¹ The Times, September 29, 1977

²⁹² Edward F. Mickolus, *op.cit*, P. 729; For further reading concerning Lockheed bribery case, see *Far Eastern Economic Review: Asia 1977 Yearbook*, PP. 196-198

²⁹³ The Times, September 30, 1977

by releasing the prisoners on demand, the Japanese government unbalanced the doctrine of the rule of law while, on the other hand, it justified its action by maintaining that flouting of law was inevitable to save the lives of the hostages.²⁹⁴ The decision of the Japanese government to release the prisoners was heavily criticized, particularly because six of the nine prisoners were flown to Dacca with the ransom on October 1, Japanese Law Day.²⁹⁵ In Dacca, the hijackers released 106 hostages in exchange for money and the prisoners.²⁹⁶ On October 2, the hijacked aircraft with 36 hostages, 5 hijackers and their released prisoners flew to Damascus, Syria and Kuwait, where 17 hostages were released, and finally landed in Algeria, where the hijackers released all hostages and surrendered to the authorities.²⁹⁷

After the resolution of the JAL hijacking, a great controversy arose over the Algerian decision to grant the hijackers asylum, as well as the Japanese agreement to capitulate. After the rejection of landing permission by ten nations, Japan agreed to Algerian demands not to press for the return of the hijackers or ransom, which caused the resignation of the Japanese Justice Minister, Hajime Hukuda, who took full responsibility for the decision.²⁹⁸ Following strong public protest, the Japanese government asked Algeria to extradite the terrorists and return the ransom.²⁹⁹ However, the Algerian authorities rejected the

²⁹⁴ Far Eastern Economic Review: Asia 1988 Yearbook, P. 206; The Times, September 30, 1977

²⁹⁵ Ibid; Edward F. Mickolus, op.cit, P. 730

²⁹⁶ The Times, October 2, 1977

²⁹⁷ The Times, October 3 and 4, 1977;

²⁹⁸ The Times, September 30, October 2 and 4, 1977

²⁹⁹ The Times, October 5, 1977

Japanese requests.³⁰⁰ At the same time, to deflect increasing international criticism of its becoming a haven for terrorists, Algeria defended its policy by saying that negotiating with terrorists saves innocent lives and that it was honour bound to abide by agreements made with the hijackers.³⁰¹

When faced with the threat of attack against civil aviation, Japan's situation was no different from that of any other state. Until the JAL hijacking of 1977, Japan had suffered 13 such incidents, the cumulative effect of which brought Japan to the realisation that strong security measures to cope with aviation terrorism were required. After the resolution of the JAL hijacking, the Japanese government and JAL announced that they would be implementing new anti-hijacking security measures. Under a new set of measures designed to thwart the activities of Japanese terrorists, 5,600,000 valid passports were withdrawn and replaced with new documents. The decision to do this was taken after discovering that the Japanese terrorists were carrying false passports.³⁰² In addition, the Japanese police discovered that the hijackers, with their firearms concealed in tins of biscuits, had boarded the aircraft at Bombay airport. Consequently, the Japanese Cabinet decided to introduce a strict system for the inspection of the luggage and personal belongings of air travellers and Japan Airlines introduced a double system of checking passports and luggage at 17 international airports.³⁰³

300 The Times, October 6, 1977

301 Edward F. Mickolus, *op.cit.*, P. 731

302 The Times, November 9, 1977

303 The Times, November 9, 1977

Since 1980, there have been no aircraft hijackings involving Japanese civil aviation up to the time of writing, thanks to proper security measures. However, attacks against airline facilities have increased since 1983. In fact, as pre-boarding security procedures rendered aircraft hijacking more difficult to initiate, soft targets such as airports and airline offices have come under increasing attack in Japan as in other states. The Table III-11 shows this development in the 1980s.³⁰⁴

Table III-11

**Attacks against Airline Facilities in Japan
(1981-1990)**

Year	Airport and Airline Office
1981	0
1982	0
1983	1
1984	3
1985	11
1986	0
1987	0
1988	3
1989	1
1990	0
Total	19

Table III-11 shows that attacks against airline facilities dramatically increased in 1985. All of the attacks, which occurred at New Tokyo International Airport, were radical reactions to the approval of funds for the expansion of New Tokyo International Airport.

³⁰⁴ Data are drawn from U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation, 1981-1985; and Criminal Acts Against Civil Aviation, 1986-1989

III-5-3. The Philippines

Like Japan, the Philippines has sporadically suffered from aircraft hijackings and sabotage bombings since the late 1940s. From 1949 to 1969, there were only two aircraft hijackings and two sabotage bombings in flight. Since then, however, attacks against Philippine civil aviation have gradually increased. The Table III-12 below shows the development of such attacks from 1970.³⁰⁵

Table III-12

Attacks against Philippine Civil Aviation (1970-1990)

Date	Type	Objective	Casualties
04/21/1970	Sabotage Bombing	Unknown	36(K)
06/02/1970	Sabotage Bombing	Unknown	1(K), 12(I)
09/16/1972	Sabotage Bombing	Unknown	0
10/11/1973	Hijacking	Unknown	0
02/25/1975	Hijacking	Escape from law	0
06/03/1975	Sabotage Bombing	Unknown	1(K), 45(I)
10/07/1975	Hijacking	Unknown	0
04/07/1976	Hijacking	Release of prisoners /Extortion	0
05/21/1976	Hijacking	Extortion	13(K), 14(I)
08/18/1978	Sabotage Bombing	Unknown	1(K), 3(I)
07/12/1980	Hijacking	Extortion	0
05/21/1982	Hijacking	Unknown	0

One of the most dramatic attacks against Philippine civil aviation occurred on April 7, 1976, when a domestic Philippine Airlines (PAL) aeroplane, flying from Cagay de Oro to Mactan, with seventy two passengers on board was hijacked

³⁰⁵ Data are compiled from U.S. Department of Transportation, FAA, Aircraft Hijackings and Other Criminal Acts Against Civil Aviation Statistical and Narrative Report: Updated to January 1, 1986; (Significant) Worldwide Criminal Acts Involving Civil Aviation, 1974-1985; and Criminal Acts Against Civil Aviation, 1986-1989; Keesing's Contemporary Archives

to Manila by three members of the Moro National Liberation Front (MNLF), a Muslim secessionist group that had been fighting government forces in the southern Philippines since 1972.³⁰⁶ The hijackers demanded a ransom of \$300,000 and the release of several political prisoners. At the same time, they threatened to kill all the hostages if their demands were not met.³⁰⁷ During the negotiation at Manila airport, however, the Philippine authorities refused to hand over a ransom and to release political prisoners under any circumstances.³⁰⁸ In this situation, the hijackers took off on April 9, leaving all but 11 crew members and the Vice-President of PAL.³⁰⁹ After flying via Kota Kinabalu and Kuala Lumpur to Bangkok, where the hijackers released several hostages,³¹⁰ they took off in a another PAL aircraft for Libya, stopping at Karachi on April 12. On arriving at Benghazi, Libya, on April 13, the hijackers asked to speak to Colonel Muammar Gaddafi and were granted political asylum after threatening to blow up the aircraft and kill the hostages. Shortly thereafter, the hijackers released the hostages and surrendered to Libyan authorities.³¹¹

Another serious incident took place about six weeks later. On May 21, 1976, six men claiming to be members of the MNLF hijacked a PAL flight with 103 passengers. The hijackers, armed with pistols and grenades, forced the pilot to fly to Zamboanga in the Philippines, where they demanded a ransom of

³⁰⁶ The Times, April 8, 1976

³⁰⁷ Ibid; Keesing's Contemporary Archives, July 9, 1976, P. 27822

³⁰⁸ Ibid

³⁰⁹ The Times, April 9, 1976

³¹⁰ The Times, April 10 and 12, 1976

³¹¹ The Times, April 13 and 14, 1976

\$375,000 as well as another aircraft to fly them to Libya.³¹² During the negotiation, the Philippine authorities offered amnesty to the hijackers if they released all hostages, while refusing to pay ransom or provide an aircraft. However, the hijackers refused a peaceful settlement. At this point, a special hijacking task force, known as AVESCOM, instituted by the Philippine government in 1972 stormed the aircraft.³¹³ Unfortunately, this operation failed owing to insufficient preparation. During the rescue operation, the hijackers exploded grenades, which caused many casualties. As a result 16 people, including 3 hijackers, were killed and 19 people were injured.³¹⁴ It was reported that the hijackers had smuggled the weapons on board in their clothing.

III-5-4. People's Republic of China

The scope and nature of aviation terrorism in China, like that in the Soviet Union, is obscure. However, some sources indicate that China has also suffered from problems of aviation terrorism.³¹⁵ The attacks against Chinese airlines have been known to the Western states since 1982. The Table III-13 shows this development.³¹⁶

³¹² The Times, May 22, 1976; Keesing's Contemporary Archives, July 9, 1976, P. 27822

³¹³ The Times, May 24, 1976; Leroy Thompson, op.cit, P. 149

³¹⁴ Keesing's Contemporary Archives, July 9, 1976, P. 27822

³¹⁵ The Times, July 26, 1982

³¹⁶ Data are compiled from U.S. Department of Transportation, FAA, Aircraft Hijackings and Other Criminal Acts Against Civil Aviation Statistical and Narrative Report: Updated to January 1, 1986; Worldwide Significant Criminal

Table III-13

**Aircraft Hijackings in People's Republic of China
(1982-1990)**

Date	Objective/Destination
07/25/1982	Taiwan
05/05/1983	Political Asylum
06/25/1985	Unknown
05/12/1988	Political Asylum
04/24/1989	Taiwan
12/16/1989	Political Asylum
10/02/1990	Taiwan
12/06/1990	Unknown

The first confirmed attack against civil aviation in China occurred on July 25, 1982, when five young men who had commandeered a Civil Aviation Administration of China(CAAC) aircraft, flying from Xian to Shanghai, were overpowered by the crew and passengers.³¹⁷ The Chinese government introduced security checks on all internal flights in November 1981, checks for passengers on international flights having commenced seven months earlier. It was reported that their introduction of security checks came after an unconfirmed incident in 1981 in which a lone hijacker attempted to divert a CAAC domestic aircraft to Taiwan.³¹⁸

The first recorded successful hijacking of a CAAC aircraft out of China occurred a year later. On May 5, 1983, five men and a woman hijacked a

Acts Involving Civil Aviation, 1981-1985; and Criminal Acts Against Civil Aviation, 1986-1989; Keesing's Contemporary Archives

³¹⁷ The Times, July 26, 1982

³¹⁸ Ibid

CAAC domestic aircraft, flying from Shenyang to Shanghai, and the hijackers forced it to fly to South Korea and landed at an army base near Chuncheon.³¹⁹ After landing at Chuncheon, the hijackers held the 92 passengers and 5 crew members until they finally surrendered to the South Korean security forces, requesting political asylum in Taiwan.³²⁰ On May 5, the Chinese authorities demanded that the South Korean authorities should immediately return the passengers with the hijacked aircraft and hand over the hijackers. On May 7, the director of the Civil Aviation Administration of China, Shen Tu, arrived in Seoul with a delegation for direct negotiations with the South Korean authorities to return the aircraft, passengers and crew.³²¹ During the negotiations, the Chinese delegation was in a dilemma. Although this hijack incident was dissimilar in nature, it was galling for China that this should have happened only a week or two after a pilot in the Taiwan Air Force had flown his reconnaissance aircraft to China and asked for political asylum.³²² After three days of talks, the South Korean authorities agreed to return the aircraft, passengers and crew. However, the South Korean government decided to allow the hijackers to remain in South Korea (as no extradition treaty existed between the two states), but put the hijackers on trial in its own court under South Korean domestic law, rejecting a Chinese request that they be repatriated.³²³ The South Korean authorities defended their decision by saying that "No Western States have returned

³¹⁹ The Times, May 6, 1983

³²⁰ Ibid

³²¹ The Times, May 6 and 8, 1983.

³²² The Times, May 9, 1983

³²³ Ibid; Keesing's Contemporary Archives, May 1984, P. 32862

hijackers" and the South Korean government exercised its right to try them in accordance with international agreements and practice.³²⁴ The passengers, crew members and the hijacked aircraft returned to China on May 10 and 18, 1983.³²⁵ Meanwhile, on May 18, the six hijackers were found guilty of violating South Korea's aviation safety law, illegal possession of firearms and violating immigration law and were given sentences ranging from four to six years, a subsequent appeal being dismissed.³²⁶ The Taiwanese government expressed its strong dissatisfaction and deep regret over the decision to uphold the sentences on the hijackers and said that it would take measures to secure their early release.³²⁷ The Chinese government also complained that the sentences given to the hijackers were too lenient and not in conformity with the Hague Convention of 1970 which provides that each Contracting state undertakes to make the offence punishable by severe penalties.³²⁸

After resolution of the incident, CAAC officials said that the crew of the national airline had received orders to resist hijackers if the safety of the passengers was assured. Mr. Shen Tu, director of the CAAC, admitted that there

³²⁴ The Times, May 9, 1983

³²⁵ The Times, May 10 and 19, 1983

³²⁶ The Times, June 2, July 19, August 19 and 26, 1983

³²⁷ The Taiwanese government had earlier called on the South Korean government, which was the only Asian government continuing to recognize Taiwan as the sole legitimate government of China, to grant the hijackers' request for political asylum in Taiwan. On August 13, 1984, subsequently, South Korean government released the six hijackers and sent them to Taiwan. This decision coincided with a special amnesty marking South Korean's liberation anniversary. See The Times, August 14, 1984

³²⁸ Keesing's Contemporary Archives, May 1984, P. 32862

were some shortcomings in aviation security procedures, and promised they would be tightened up.³²⁹ In spite of the Chinese government's efforts to prevent such attacks, security inspection procedures at Chinese airports are still poor. This was demonstrated in October 1990, when a domestic aircraft belonging to Xiamen Airlines was hijacked by a young Chinese male. Shortly after the aircraft took off from Xiamen in Fujian Province, the hijacker forced his way into the cockpit. He threatened the crew with an explosive device, which he claimed contained 15.4 pounds of explosives, and forced the pilot to fly to Taiwan. Chinese authorities granted the pilot permission to refuel at Hong Kong and continue on to Taiwan. Furthermore, the authorities cleared the aircraft to land at any foreign or domestic airport, but the pilot decided to land at Baiyun Airport, the flight's intended destination. When the hijacker belatedly realised where the aircraft was landing, he attacked the pilot causing him to lose control of aircraft, which first struck an empty China Southwest Airlines B-707 and then a loaded B-757 awaiting take-off before bursting into flames. This crash resulted in the deaths of 128 persons and more than 50 others were injured.³³⁰ This incident caused great concern about the safety of civil aviation.

³²⁹ The Times, May 17, 1983

³³⁰ U.S. Department of Transportation, FAA, Criminal Acts Against Civil Aviation: 1990, P. 15

III-5-5. The Responses and Problems of Aviation Security

When faced with the problem of attacks against civil aviation, Asian states are not isolated. In an attempt to tackle the problem, the governments in Asia have adopted measures to prevent and deter acts of violence against civil aviation. All Asian governments except Burma and Taiwan are now parties to international conventions which define acts of violence against civil aviation as offences and recommend the arrest, investigation and extraditions of offenders. These conventions have paved the way for many Asian states to pass anti-hijacking and sabotage laws. At the same time, with the recognition of the threats, many governments introduced specific preventive and counter-measures including Sky Marshal and airline screening procedures to detect firearms and explosives. However, civil aviation security procedures in Asian states are mostly inadequate. According to a report by IATA which has carried out a survey programme of international airports to identify weakness in respect of aviation security defences, there are several security loopholes in this region. One of the reports dealing with an airport in Asia described the fundamental security problem as follows:

"The airport had, for the most part, an adequate fence with access points controlled by security staff. There was, however, a problem caused by the presence of two villages situated just outside the perimeter. Access to these villages could only be obtained by the inhabitants entering the airport through "controlled" pedestrian gates and walking close to and sometimes across the runway. Furthermore, the villagers grazed cattle and other livestock on the lush grass inside the perimeter and cut grass and reeds for their personal use".³³¹

³³¹ Rodney Wallis, "Aviation Security", Paper for Discussion at University of St. Andrews, October 10, 1991, PP. 13-14

This might be an extreme situation in one of the poor states in this region, but it is by no means exceptional. In addition, after an Austrian Air Lauda aircraft exploded over central Thailand killing 223 people in May 1991, a review of Asian airports revealed that there is much to be concerned about with regard to the safety of civil aviation in Asian states. Although the International Civil Aviation Organization, which sets minimum international safety standards, require X-ray or hand inspection of all the checked luggage,³³² not all airports in this region compelled airlines to conduct X-ray checks on luggage. The requirement for X-ray checks at the height of the Gulf crisis was introduced at major airports in Asian states after the warning of the U.S. State Department, suggesting that Asian states might be vulnerable to Middle Eastern terrorist activity linked to the Gulf crisis. With relaxation of the Gulf crisis, the requirement was dropped and a number of smaller airlines eliminated the X-ray luggage searches.³³³ This passive attitude to airport security might bring another disaster in this region. Although some major airlines in Asia undertake tight security procedures, most of the small Asian airlines are reluctant to expend money on aviation security measures because it would cut into their profits.³³⁴

It is disturbing to note that even in the least well-equipped airports in this region, there are many loopholes. In 1988, a Kuwait airliner was hijacked after terrorists had smuggled guns on board at Bangkok, Thailand. Apparently the guns were concealed in the hijackers' shoes, and were not registered by the metal detectors that hijackers walked through because the detectors were not

³³² Bangkok Post, May 30, 1991

³³³ The International Herald Tribune, May 28, 1991; The Independent, May 29, 1991; The Scotsman, May 30, 1991

³³⁴ Bangkok Post, May 30, 1991

sensitive all the way to the ground.³³⁵ Although this limitation is inherent in the equipment, manual searches by security personnel to detect such smuggling of guns in that way can overcome this problem. It was reported that security around parked aircraft is also light. A golf course that is open to the public runs between the two runways at one of the Thai airports, and there are no fences to stop people wandering from the fairways up to the airport terminal.³³⁶

Furthermore, insufficient training of security officers is also one of the problems in this region. For example, it was reported that a two-part explosive package was closely examined by security staff at Bangkok airport, but allowed on to the aircraft because security officers did not recognize what the package actually was. This led to a Thai aircraft hijacking by Burmese students in 1990.³³⁷ In addition, the low salaries paid to security staff in this region have rendered the staff more susceptible to corruption that could in turn allow penetration of airport security.

III-5-6. Closing Remarks

According to the ICAO, the largest traffic growth is in the Asia/Pacific region with increases averaging about 9 per cent annually, well above the world average. ICAO expects this growth to continue to the point where the region will account for 39 per cent of the world's passenger traffic by the year 2000,

³³⁵ The Independent, May 28, 1991

³³⁶ The Independent, May 28, 1991

³³⁷ Bangkok Post, June 2, 1991

compared to 19 per cent in 1986.³³⁸ However, the civil aviation security measures, which currently exist to ensure safety, are largely inadequate. The general problem of aviation terrorism in Asia has been compounded by lack of technological know how, outmoded security equipment, inadequate training of security staff and human failure during passenger screening. However, the most serious problem is the passive attitude of some airlines and governments to aviation security. In this situation and in conditions as they exist at present,, there is no doubt that civil aviation in this region will remain a vulnerable target.

III-6. Latin American States

It is generally accepted that acts of violence against civil aviation are not limited to the major western states. Though the problems of aviation terrorism in Latin American states are virtually unknown in the West, the extent of aviation terrorism experienced in Latin America is substantial. In fact, it is interesting to note that Latin America is the birthplace of aviation terrorism. As mentioned earlier, the first aircraft hijacking in civil aviation history occurred in Peru in 1931. The following Table III-14 traces the development of aircraft hijacking in this region.³³⁹

338 "Airport Congestion - A Special Report, ICAO Bulletin, January 1989

339 Data are drawn from U.S. Department of Transportation, Narrative Report and Criminal Acts Involving Civil Aviation: 1986-1990

Table III-14

**Aircraft Hijackings in Latin American States
(1931-1990)**

Year	No. of Incidents
1931-1955	2
1956-1960	15
1961-1965	5
1966-1970	66
1971-1975	30
1976-1980	15
1981-1985	22
1986-1989	7
1990	5
Total	167

The Table III-14 shows that well over than 70 per cent of aircraft hijackings occurred prior to 1975. This illustrates that most of the aircraft hijackings were related to the political unrest during that period. However, a large number of incidents have occurred in the last 15 years and violence against civil aviation still poses a threat in this region. After the first aircraft hijacking in 1931 in this region, such attacks contained until the early 1960s. From the late 1960s, many states in this region started to suffer from the attacks, particularly Colombia, Cuba, Mexico, Brazil and Venezuela(see Table III-15).³⁴⁰

³⁴⁰ Ibid

Table III-15

**Aircraft Hijacking By State
(1931-1990)**

Name of State	No. of Incidents
Colombia	51
Cuba	22
Venezuela	15
Brazil	14
Mexico	14

III-6-1. Colombia

Colombia is one of the states which has suffered from frequent aircraft hijacking. In fact, more than 50 per cent of the aircraft hijackings in this region occurred in Colombia. The first such attack against Colombian Airlines occurred on August 6, 1967, when an Aerocondor DC-4 was hijacked to Cuba by five pro-Castro guerrillas who were granted political asylum by Castro. All passengers and crew members were released the next day by the Cuban government.³⁴¹ A month later, a similar incident took place. After these initial attacks, aircraft hijacking increased on a large scale. There were 13 aircraft hijackings in 1969. The following Table III-16 illustrates this development.³⁴²

³⁴¹ Edward Micklous, op.cit, P. 77

³⁴² Data are drawn from Narrative Report and Criminal Acts Involving Civil Aviation: 1986-1990

Table III-16

**Aircraft Hijacking In Colombia
(1967-1990)**

Year	No. of Incidents
1967	2
1968	3
1969	13
1970	4
1971	4
1972	1
1973	1
1974	4
1975	1
1976	2
1977	0
1978	1
1979	0
1980	1
1981	2
1982	3
1983	0
1984	0
1985	6
1986	0
1987	0
1988	2
1989	1
1990	0
Total	51

As in Eastern Europe, aircraft hijacking in Colombia reflects the social and political climate. Colombia's long tradition of political violence goes back to 1840, when revolts by local caudillos against central government power gave rise to a two-year civil war. Another inter-provincial, civil war occurred in the early 1860s, and dozens of localized conflicts were recorded throughout the remainder of the century. A civil war costing about 100,000 lives took place in 1899-1902. The period from the late 1940s to the mid-1950s was known in Colombia as La Violencia. During this period about 180,000 Colombians were

killed in acts of violence, some attributed to banditry and local disputes but mainly to a civil war between conservative and liberal factions. In the 1960s and 1970s thousands more lost their lives as a result of left wing guerrilla warfare and official and unofficial counter-insurgency activities, including killings by the drug industry death squads.³⁴³ During this social and political turmoil, more than 50 per cent of the aircraft hijackings took place. In this period, left-wing guerilla organization started to exploit aircraft hijacking for their political ends. For example, on March 5, 1968, an Avianca DC-4 flying from Riohacha to Baranquilla was hijacked to Cuba by three members of the National Liberation Army(ELN), a left-wing revolutionary group influenced by the Cuban revolution and by liberation theology.³⁴⁴ The hijacking of Colombian passenger aircraft by guerrilla movements increased steeply during the second half of 1968, and continued at a still more accelerated rate in early 1969. Most of the hijacked aircraft were diverted to Cuba and in all these cases the Cuban authorities permitted the return of the passengers in another aircraft, but insisted on the separate return of the hijacked aircraft and demanded full payment for the cost of accommodating the passengers and of landing and other charges, with often considerable delays in the settlement of such incidents and great extra expense to the airlines affected.³⁴⁵ In addition to the aircraft hijacking by guerrilla organizations, the Colombian people, fearing civil war, hijacked aircraft as a means of transportation to a non-war zone. For example, on May 31, 1970, an Avianca aircraft was hijacked by a couple with their five children.

343 Ciaran O Maolain(ed), Latin American Political Movements, London: Longman, 1985, PP. 57-58; Keesing's Contemporary Archives, September 18-25, 1971, PP24825-24829

344 Edward F. Mickolus, op.cit, P. 85

345 Keesing's Contemporary Archives, February 15-22, 1969, P. 23202

After the initial peak of aircraft hijackings in Colombia, such attacks were largely contained until 1980. Aircraft hijacking, however, posed a threat once again during the social and political unrest in the early 1980s. Before the Presidential and Congressional elections in the spring of 1982, left-wing guerrilla activities had been intensified. With the intention of bringing about a negotiated settlement with guerrilla movements including M-19, a new left-wing urban guerrilla movement, which claimed that it was prepared to discuss a cease-fire, President Turbay Ayala set up a consultative peace commission of leading public figures in October 1981 and worked for the introduction of a general amnesty. This effort failed, however, to make any substantial impact due to opposition from the guerrilla movements which demanded a full amnesty. The Colombian government refused to suspend the sentences imposed on guerrillas for political crimes.³⁴⁶

During the amnesty negotiations, seven M-19 guerrillas, apparently in support of M-19's call for a general amnesty for their leader, Sr Jaime Bateman, who had received a 30 years sentence for rebellion, sedition and other crimes, hijacked a Colombian airline Aerotal B-727 on a internal flight from Bogota to Pereira. The hijackers demanded that their leader be allowed to contest the presidency. They forced the pilot to return to Bogota where they asked to talk to a journalist and a member of the commission involved with negotiating an end to guerrilla activity in Colombia. After returning briefly to Bogota and threatening to blow up the aircraft, the hijackers flew to Cali, where 47 passengers were released. The aircraft was subsequently damaged late on January 27 when Colombian troops tried to storm it. All but two of the hostages

³⁴⁶ John Richard Thackrah, Encyclopedia of Terrorism and Political Violence, London: Routledge & Kegan Paul, 1987, PP. 12-13

were freed on the next day in exchange for a safe passage and the hijackers were flown to Cuba where they surrendered to the Cuban authorities.³⁴⁷

After the elections, the new President, Delisario Betancur Cuartas, continued with efforts to achieve a truce with the guerrilla groups. An amnesty was declared in November 1982, and was accepted by about 2,000 guerrillas. After long negotiations between the government and the guerrilla leaders, a cease-fire was declared in May 1984, and most of the guerrilla groups had come to an agreement with the government by August which permitted them to engage in electoral politics without disbanding or disarming their forces. Sporadic violence continued, however, some of it related to the drug trade rather than to politics. An amnesty law passed by Congress in May 1985 allowed for the reintegration into civilian life of guerrillas accused of political offences other than kidnapping, extortion and murder outside armed combat, but in June the M-19 movement announced that the truce was at the end. Together with smaller groups it resumed armed activities, while the larger guerrilla groups including the Revolutionary Armed Forces of Colombia(FARC) maintained their support for the peace process.³⁴⁸ This social and political turmoil continued until late 1980s.

In this unstable political situation, though specific data is not available, it was reported that there were 8 aircraft hijackings, largely by the left wing, in Colombia in 1985 and two in 1988. As in other states, problems of aircraft hijacking in Colombia, have in fact decreased. However, a sabotage bomb attack on a Avianca aircraft in November 1989, which resulted in the total destruction

³⁴⁷ U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation, January-December 1982, PP. 2-3; Keesing's Contemporary Archives, September 24, 1982, 31721

³⁴⁸ Ciaran O' Maolain, op.cit, P. 58

of the aircraft and the death of all passengers, demonstrated that attacks against civil aviation still pose a great threat. On November 27, 1989, Avianca Flight 203 exploded shortly after take-off from El Dorado International Airport in Bogota, Colombia. The aircraft was on a domestic flight between Bogota and Cali. The wreckage was strewn over several miles across two hillsides near Socha.³⁴⁹ Forensic evidence indicated that an improvised explosive device had been placed under a seat in the passenger compartment. The location of the device over the central fuel tanks apparently caused the explosion to initiate a fuel fire and resulted in the subsequent disintegration and crash of the aircraft.³⁵⁰ Hours later, a person telephoned the Caracol radio network saying that the Extraditables, a group of cocaine traffickers linked with the Medellin cartel, had put the bomb on the plane because, he said, police informants were on board.³⁵¹ While there is no firm evidence in the public domain to prove this theory, it is certainly within the realm possibility. After the assassination of Luis Carlos Galan, a leading candidate for the 1990 presidential election, by the Medellin drug cartel, the Colombian government launched massive raids on the headquarters and laboratories of the Medellin barons, causing severe damage to the drug cartel. At the same time, moves were made to enact a law on extradition of suspected drug traffickers to the United States.³⁵² There is a great possibility that, in retaliation to this government action, the drug cartel targeted a civilian aircraft causing tremendous psychological impact.

³⁴⁹ The International Herald Tribune, November 28, 1989

³⁵⁰ U.S. Department of Transportation, FAA, Criminal Acts Against Civil Aviation: 1989, P. 8

³⁵¹ The International Herald Tribune, November 28, 1989

³⁵² The International Herald Tribune, December 11, 1989; Richard Clutterbuck, Terrorism. Drug and Crime in Europe after 1992, London: Routledge, P. 111

III-6-2. Mexico, Venezuela and Brazil

In addition to Colombia, other states such as Cuba, Mexico, Venezuela and Brazil have experienced a substantial number of aircraft hijackings. As discussed in the previous section, most of the acts of violence against civil aviation in Cuba occurred prior to the mid-1960s. Over the last two decades, there were only two attacks against Cuban civil aviation. Mexico, Venezuela and Brazil also suffered from sporadic aircraft hijacking prior to the 1980s. There remains, however, a considerable threat of acts of violence against civil aviation today.

The first aircraft hijacking in Venezuela occurred on November 27, 1961, when an Avensa DC-6B was hijacked by five men to the Netherlands Antilles. Like Colombia, most of the aircraft hijackings in Venezuela have arisen as a result of the unstable political situation. In January 1958, after the dictatorship of the centre-left Accion Democratica(AD-Democratic Action) regime of Romulo Gallegos was overthrown by a popular revolt, Accion Democratica took up the reins of power once again under the leadership of Romulo Betancort. As a result of this, extra-parliamentary protests, organized by splinter groups of the AD, began in 1960. In 1962 the Fuerzas Armadas de Liberacion Nacional(FALN-Armed Forces of National Liberation) began a guerrilla campaign including kidnappings, robberies and aircraft hijackings in conjunction with Movimiento de Izquierda Revolucionaria(MIR-Revolutionary Left Movement) in order to disrupt the 1963 elections. Approximately a month before the elections, six members of the FALN hijacked an Avensa airline aircraft flying from Ciudad Bolivar to Caracas. Hijackers armed with machine guns forced the pilot to circle Ciudad Bolivar while they dropped propaganda leaflets telling its citizens not to vote in the national elections. They then diverted the aircraft to Port-of-Spain,

Trinidad, where they were arrested.³⁵³ With the political unrest, it was reported that there were three more aircraft hijackings in the late 1960s. Such attacks also occurred in the early 1970s. On May 18, 1973, four left-wing guerrillas hijacked a domestic Avensa Convair 580 with 37 passengers and five crew members. This time, the hijackers demanded the release of 79 political prisoners from Venezuelan jails. They threatened to blow up the plane unless their demand was met. However, the Venezuelan government announced its refusal to discuss the demand of the terrorists. The hijacked aircraft was flown via Mexico City to Cuba, where the hijackers were granted political asylum.³⁵⁴

Political unrest in this state continued until early 1980s. The left-wing movements including Bandera Roja(BR-Red Flag) and Comando Ramon Emeterio Betance(CREB-Ramon Emeterio Betance Commando), which had been involved in violent incidents in the early 1970s, were again involved in kidnappings and hijackings in the late 1970s and 1980s. The most spectacular of those incidents occurred on December 7, 1982, when three Venezuelan domestic aircraft, an Aerovias Venezolanas(Avensa) B-727 aircraft and two Linia Aeropostal Venezolana(Aeropostal) DC-9 aircraft, were hijacked to Cuba by CREB guerrilla group members, armed with submachine guns, pistols and hand grenades. The hijackers demanded the release of 23 alleged political prisoners in Venezuela and a ransom of \$10,000,000. They also appealed for solidarity with the guerrillas of El Salvador and distributed leaflets on behalf of the Comandos Internacionales Manuel Rojas Luzardo(CIMRL-Manuel Rojas Luzardo International Commandos. The route taken was by way of the Netherlands Antilles, El Salvador, Honduras, Guatemala and Panama, where about half of the

³⁵³ Edward F. Mickolus, *op.cit*, P. 61

³⁵⁴ Keesing's Contemporary Archives, August 27-September 2, 1973, P. 26068

hostages were released, the hijacked aircraft then flew to Cuba, where the 11 hijackers were taken into custody by Cuban authorities. All the remaining hostages and the aircraft were returned safely to Venezuela. The Cuban government pointed out that the aircraft had landed in Cuba for purely technical reasons and announced in a note to the Venezuelan authorities on December 9 that the hijackers would be tried under the Venezuelan-Cuban anti-hijacking convention of July 1973.³⁵⁵

The first aircraft hijacking in Brazil occurred on October 8, 1969, when a Brazilian Cruzeiro do Sul Caravelle flying from Belem to Manaus was hijacked to Cuba by six men armed with submachine guns and nitroglycerin.³⁵⁶ Most of the aircraft hijackings in Brazil occurred from 1969 to 1970. This incident reflected the political and social unrest during this period. After the leftist President Joao Goulart was deposed by a right-wing military coup which installed a government under General Humberto Castelo Branco in April 1964, Brazil remained under effective military rule for the next two decades. In fact, the Castelo Branco regime and the succeeding military government kept a tight grip on the state and met with little effective opposition from political or guerrilla movements. However, left-wing organizations such as Alianca Libertadora Nacional(ALN) led by Carlos Marighella and Vanguarda Popular Revolucionaria(VPR) led by Carlos Lamarca engaged in limited guerrilla warfare in the late 1960s and early 1970s. During this period, the military government was accused of many breaches of human rights, involving inter alia the disappearance of hundreds of members of left-wing organizations and

³⁵⁵ U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation: January-December 1981, PP. 20-21; Ciaran O Maolain, op.cit, P. 256; Keesing's Contemporary Archives, April 23, 1982, P. 31451

³⁵⁶ Edward F. Mickolus, op.cit, P. 141

political detention. In this political situation, guerrilla organizations adopted aircraft hijacking as a tactic to release their members from prison. For example, on July 1, 1970, four members of the ALN, armed with machine guns and revolvers, attempted to hijack a Cruzeiro do Sul Caravelle flying on the Rio-Sao Paulo-Buenos Aires route with 34 passengers and 3 crew members to Cuba. One of the hijackers shot the pilot in the legs, but he still managed to fly back to Rio. When the hijackers discovered where they were, they demanded to be allowed to take off again, threatening to kill the passengers one by one. However, the President of Brazil gave the order that the hijacked aircraft was not to leave. Under this order, air force policemen immobilized the aircraft by shooting out the tires and thirty armed officers stormed the aircraft successfully. The hijackers claimed that they were going to use the passengers as hostages for the release of political prisoners but were arrested before their demands could be met.³⁵⁷ After the initial peak of aircraft hijacking in 1969 and 1970, such attacks have been contained under the effective military rule. In fact, there were only three such incidents between 1973 and 1990.

The first aircraft hijacking in Mexico occurred on October 6, 1968, when an aircraft of Aeromaya Airlines was hijacked to Cuba by an Argentine citizen residing in Mexico.³⁵⁸ As in many other states in this region, most of the aircraft hijacking in Mexico reflected social and political unrest. After 50 years of relative calm under the government of the Partido Revolucionario Institucional (Institutional Revolutionary Party-PRI), serious disturbances broke out in Mexico in 1968. A student strike developed into a full-scale revolt against the ruling PRI by various left-wing guerrilla movements which remained active

³⁵⁷ Edward F. Mickolus, *op.cit.*, P. 192

³⁵⁸ *Ibid.*, P. 99

during the 1970s. In this unstable situation, some of the left wing guerrilla groups adopted aircraft hijacking as a tactic to achieve their goal. For instance, on November 8, 1972, four members of the Armed Communist League hijacked a Mexicana de Aviacion B-727 flying from Monterrey to Mexico City with 104 passengers. The hijackers demanded the release of five of their colleagues who had been arrested in November 1972 during a police search, 4 million pesos, two machine guns with ammunition and a doctor to accompany a wounded prisoner. All demands were met by the Mexican government and the hijackers forced the pilot to fly to Cuba, where they were granted political asylum. Mexico requested extradition of the hijackers and prisoners but the Cuban government refused on the grounds that their action was political.³⁵⁹ This aircraft hijacking led the Mexican government to negotiate with the Cuban government on this matter. This effort by Mexico produced an agreement with Cuba on the prevention of aerial piracy in 1973.³⁶⁰ Judging from the statistic of aircraft hijacking in Mexico, although the agreement was not a complete answer to the problem of aircraft hijacking, it was in a large measure successful. In fact, between 1974 and 1982, there was only one aircraft hijacking on May 16, 1978, when two men who claimed to be carrying a suitcase full of dynamite seized an Aeromexico. The men allegedly hijacked the aircraft to obtain publicity and to assure justice against Mexico's cheating doctors. The aircraft landed safely at Mexico City where both hijackers surrendered to the authorities.³⁶¹ In 1983, there were two hijacking attempts. In both cases, the hijackers were

³⁵⁹ Ibid, PP. 358-359

³⁶⁰ Keesing's Contemporary Archives, August 27-September 2, 1973, P. 26068

³⁶¹ U. S. Department of Transportation, FAA, Significant Worldwide Criminal Acts Involving Civil Aviation: January-December 1978, P. 5

overpowered by the security forces. Since then, aircraft hijacking has been largely contained, up to present, though in 1988, there was one incident.

III-6-3. The Responses and Problems of Aviation Security

In some Latin American states, acts that may be characterized as terrorist, including aircraft hijacking and related attacks on civil aviation, are prosecuted under the relevant provisions of a state's criminal laws or penal code. Unfortunately, not every State's legislation is comprehensive enough to cover aircraft hijacking or other attacks against civil aviation.³⁶² The effectiveness of this legislation lies in its deterrent value. This is demonstrated by the apprehension and prosecution of offenders. However, many states in the region do not have a capacity to deal with this problem, owing to the weak structure of government which arises from social and political unrest. On November 26, 1989, the Colombian government announced new anti-terrorist measures, including the immediate arrest of suspected terrorists, life imprisonment for terrorists involved violent attacks, and an increase in the fighting strength of the military and police.³⁶³ In response, one of the Colombian officials pointed out the reality as follows: "They(terrorists) have already shown they are willing and able to kill people any time and any place. The government cannot fight that".³⁶⁴

³⁶² Alona E. Evans and John F. Murphy, Legal Aspects of International Terrorism, Lexington: Lexington Books, 1978, P. 15

³⁶³ Keesing's Record of World Events, Vol. 35, No. 7-8, 1989, P. 36866

³⁶⁴ The International Herald Tribune, December 11, 1989

In an effort to control the aircraft hijacking threats, the Mexican government concluded an agreement on the prevention of aerial and maritime piracy with the Cuban government on July 6. The agreement obliged states to which planes or ships were hijacked to either prosecute the hijackers or return them to the state of departure. However, it allowed both states to grant asylum to hijackers when they appeared to be in real and imminent danger of death or of being deprived of their liberty for clearly political reasons, and had no other way of gaining safety. The agreement also required each state to punish severely any person who conspired or took part in an attack on aircraft travelling to or from the other state.³⁶⁵ A similar agreement on the prevention of aerial hijacking between Cuba and Venezuela was signed in July 1973. This agreement followed the hijacking of a Venezuelan airliner on May 18, 1973, which was mentioned above.³⁶⁶ The conclusion of the agreement between Venezuela and Cuba signified a rapprochement between the two governments, as in previous years Venezuela had repeatedly called for joint American action against Cuba's alleged support for guerrillas in Venezuela and interference in the latter's internal affairs.³⁶⁷ In addition, an agreement on the prevention of aircraft hijacking was concluded by Colombia with Cuba on July 22, 1974.³⁶⁸ The usefulness of these agreements as a means of controlling aircraft hijacking is problematic. In fact, information about the return of hijackers from Cuba to Venezuela is not available. Similarly,

³⁶⁵ Lester A. Sobel(ed), Castro's Cuba in the 1970s, New York: Facts on File, 1978, P. 16; Keesing's Contemporary Archives, August 27-September 2, 1973, P. 26068

³⁶⁶ Lester A. Sobel(ed), *Ibid*, P. 17

³⁶⁷ Keesing's Contemporary Archives, August 27-September 2, 1973, P. 26068

³⁶⁸ Alona E. Evans and John F. Murphy, *op.cit*, PP. 20-21

there is no information about the effectiveness of the agreements between Cuba and Colombia. The decline of aircraft hijacking in Latin American states must be ascribed to hard line policy on this problem.

To deter aircraft hijacking, some of the states in this region established special counter-terrorism unit. For example, the Venezuelan government formed a anti-terrorist unit, known as the Special Intervention Brigade, which was formerly a counter-insurgency unit that assumed Hostage Rescue Unit(HRU) duties in 1978. The unit was deployed in July 1984, when it carried out a successful assault upon an Aeropostal aircraft which had been hijacked. All of the hijackers were killed and 79 passengers were rescued.³⁶⁹ There is no doubt that this successful operation secured the additional desirable effect of deterring further hijacking attempts. In addition, Colombia has two special units, known as GAJDA. These units work at airports and are trained in the anti-hijacking role. It is known that Chile has a highly secret unit, known as FACH. This unit is trained in the anti-hijacking and sky marshal role.³⁷⁰

It is generally accepted that the rescue operation is not a complete answer for problem of aircraft hijacking, although it does produce a deterrent effect. The most important factor is the implementation of effective security measures in the airports to stop the hijackers and their weapons getting on board. It is depressing, however, to note that there are many problems of aviation security in this region. With the dramatic increase in the number of aircraft hijackings, some of the Latin American governments in the 1970s effected numerous security measures. These measures were not successful. At the early stage, most

³⁶⁹ Leroy Thompson, op.cit, PP. 155-156; U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation: January-December 1984, P. 10

³⁷⁰ Leroy Thompson, Ibid, P. 153 and 157

of the hijackers managed to pass through the security checks and get aboard the aircraft with weapons.³⁷¹ In addition, until recently, some of the Latin American states did not employ tight security precautions such as passenger screening check on domestic flights. For instance, only after the VASP airliner hijacking on September 29, 1988, were the Brazilian authorities reported to be implementing the screening of passengers on domestic flights.³⁷² More specific information about the reality of civil aviation security in Latin American states is not readily available. Judging from the fact that aircraft hijackings and other forms of attack against civil aviation continue, it may be concluded that aviation security is not effective in this region. To halt the attacks against civil aviation, Latin American states must evaluate their security problems and find effective measures.

III-6-4. Closing Remarks

Although the detailed facts about acts of violence against Latin American civil aviation are little known in Western Europe, it is clear that the Latin American states have suffered from such attacks because of the unstable social and political situation which pertains there and which is inevitably the potential source of attacks against civil aviation. Unfortunately, counter and preventive measures in this region are not effective in halting such attacks. This was evidenced by several attacks involving civil aviation in recent years. In Colombia, for example, two politicians were killed, one at the El Dorado Airport

³⁷¹ James A. Arey, *op.cit.*, P. 209

³⁷² U.S. Department of Transportation, FAA, Criminal Acts Against Civil Aviation: 1988, P. 37

on March 22, 1990 and the other aboard an Avianca flight departing from Bogota, on April 26, 1990.³⁷³ In Peru, two sabotage bomb attacks occurred at the Jorge Chavez International Airport in Lima.³⁷⁴ Despite the low level of terrorist activities against airlines, airports and passengers, there is no doubt that civil aviation will remain an attractive target to both terrorists and criminals. The most serious concern is over the capabilities of the major guerrilla groups and narcotics traffickers, who have demonstrated a high level of operational sophistication and weaponry including even surface-to-air missiles. Although not specifically directed against civil aviation targets in this region, the potential threat of missile weaponry should not be ruled out.

III-7. African States

Acts of violence against civil aviation are not confined to the states of the Middle East, Europe, and the United States of America. The African states have been also affected since 1960s. The following Table III-17 traces the general view of hijacking against African states' registered aircraft.³⁷⁵

³⁷³ U.S. Department of Transportation, FAA, Criminal Acts Against Civil Aviation: 1990, PP. 30-31

³⁷⁴ Ibid, P. 35

³⁷⁵ Data are drawn from U.S. Department of Transportation, Narative Report, (Worldwide Significant) Criminal Acts Involving Civil Aviation, 1974-1990, Edward F. Mickolus, op.cit, and Edward F. Mickolus, Todd Sandler, and Jean M. Murdock(ed), International Terrorism in the 1980s: A Chronology of Events, Iowa: Iowa University Press, 1989

Table III-17

**Aircraft hijackings in Africa
(1961-1990)**

Year	No. of Incidents
1961-1968	3
1969	5
1970	5
1971	3
1972	3
1973	1
1974	1
1975	0
1976	2
1977	1
1978	0
1979	3
1980	0
1981	1
1982	2
1983	3
1984	1
1985	1
1986	1
1987	1
1988	1
1989	2
1990	2
Total	42

Thirty years after the first aircraft hijacking in Peru, the first such incident in Africa occurred on November 10, 1961, when six heavily armed members of the Portuguese exile group Frente Antitotalitario hijacked a Transportes Aeros (Portuguese aircraft), flying from Casablanca to Lisbon. The hijackers forced the pilot to circle Lisbon, where they dropped thousands of leaflets urging rebellion. Although the hijackers were expelled to Senegal from Tangier where they were held by the authorities, they were finally granted political asylum by Brazil.³⁷⁶

³⁷⁶ Edward F. Mickolus, *op.cit.*, P. 56

Similarly, at the height of Nigerian Civil War in April 1967 five sympathizers of the Republic of Biafra hijacked a Nigerian aircraft, flying from Benin City to Lagos, and diverted it to Enugu, the capital of the self-styled Republic of Biafra.³⁷⁷ In addition, on August 11, six Ethiopian students and an officials of the Ethiopian Ministry of development, armed with revolvers and knives, hijacked an Ethiopian aircraft and diverted it to Khartoum in Sudan, where they asked for political asylum. The Sudanese police returned the hijackers to the Ethiopian authorities.³⁷⁸ Another Ethiopian aircraft hijacking occurred on September 13, 1969, when three armed men hijacked an Ethiopian aircraft and forced it to Aden in South Yemen, where one of the hijackers was shot and the others were taken into custody.³⁷⁹ The Arab Liberation Front for Eritrea (ALFE) announced that it was responsible for the hijacking and would undertake further operation to undermine the Ethiopian economy.³⁸⁰

As in the case of aircraft hijacking in the Middle East, the majority of aircraft hijackings in African states have been used as a tactic to achieve political or ideological aims. On August 31, 1970, three Algerian men, who wished to obtain political asylum in Albania, hijacked an Algerian airliner on a domestic flight. However, the Albanian authorities refused to allow the airliner to land. Subsequently, the hijackers diverted the aircraft to Dubrovnick, Yugoslavia,

377 Ibid, P. 75

378 Keesing's Contemporary Archives, October 4-11, 1969, Vol. XVII, 1969-1970, P. 23604

379 Ibid

380 Ibid

where they asked for political asylum.³⁸¹ Another politically motivated incident occurred on January 22, 1971, when an Ethiopian Airways airliner on a internal flight with 23 passengers was hijacked by four members of ALFE who had carried out an earlier Ethiopian aircraft hijacking to Benghazi.³⁸²

Sometimes, the demand of the hijacker was the release of prisoners. On December 8, 1972, one of most the serious incidents involving an African state occurred. Seven students, all members of the ALFE, hijacked an aircraft belonging to Ethiopian Airlines and demanded the release from prison of fellow members of the Front. When the intention of the hijackers was announced, security guards on board the airliner immediately opened fire killing six of the hijackers. One of the hijackers, however, exploded a hand grenade which damaged the engine and rudder of the aircraft, and resulted in 11 injuries. The aircraft landed safely in Addis Ababa.³⁸³

Similarly, under the continuing strained relations existing between Egypt and Libya since 1973, three armed Arabs hijacked a domestic Egyptian aircraft as it left Cairo airport on August 23, 1976 and diverted it to Luxor instead of the hijackers' original destination, Libya, owing to the shortage of fuel. The hijackers demanded the release of five prisoners, including three Libyans sentenced in July 1976 for planning to kill the former Libyan Minister, Major Meheishi, who had been granted political asylum, and a Palestinian terrorist awaiting trial after being arrested on August 6, 1976, following an unsuccessful attempt in Cairo to assassinate the former South Yemen Prime Minister,

³⁸¹ Edward F. Mickolus, *op.cit.*, P. 206

³⁸² Keesing's Contemporary Archives, February 20-27, 1971, Vol. XVIII, 1971-1972, P. 24460

³⁸³ Edward F. Mickolus, *op.cit.*, P. 364

Mohammed Ali Haithem. However, this hijacking incident terminated when the hijackers were arrested after a successful rescue operation by Egyptian commando in the guise of mechanics.³⁸⁴ The Egyptian Prime Minister asserted that the hijackers had acted on the orders of Colonel Gadafi and had been promised a total of \$250,000 if they brought the aircraft to Libya successfully.³⁸⁵

Another such attempted hijacking occurred on January 12, 1979, when three Tunisians hijacked an Air Tunisia domestic flight and diverted it to Tripoli. The hijackers, armed with pistols and grenades, demanded the release of a Tunisian Union leader and a former Tunisian Foreign Minister. At Tripoli, the aircraft was refuelled and took off only to return again to Tripoli, where the hijackers surrendered to authorities after a takeover lasting 13 hours.

In some cases, the aim of aircraft hijacking was to make a politico-ideological statement. For instance, On February 26, 1982, five hijackers claiming to be members of the Tanzanian Revolutionary Youth Movement, seized a Tanzanian Airways domestic flight and forced the pilot to divert the aircraft to Nairobi in Kenya, Jedda in Saudi Arabia, Athens in Greece, and finally Stanstead in the United Kingdom. The hijackers, accompanied by their families, demanded the resignation of the Tanzanian president Julius Nyerere. During some 24 hours of negotiations, a British police negotiator promised to publish a list of hijackers' demands and the hijackers demanded to talk to Tanzanian and British officials restating their demands and threats. However, British officials persuaded the hijackers to surrender.³⁸⁶

³⁸⁴ Keesing's Contemporary Archives, August 12, 1977, Vol. XXIII, 1977, P. 28500

³⁸⁵ Ibid, P. 28501

³⁸⁶ Edward F. Mickolus, Todd Sandler, and Jean M. Murdock(ed), op.cit, P. 258

The nature of aviation terrorism in African states has not only been limited simply to the form of aircraft hijacking. In addition to aircraft hijacking, there have been other forms of attack against civil aviation, such as sabotage bombing and missile attack. The following Table III-18 shows the development of such attacks.

Table III-18

**Significant Sabotage Attacks against Civil Aviation in Africa
(1966-1990)**

Date	Event	Casualties
11/22/1966	Explosion of Aden Airways in flight	28(K)
06/30/1967	Explosion of Aden Airways at Aden Airport	
03/11/1969	Attack on Ethiopian Airlines at Frankfurt Airport	
03/14/1970	Explosion of United Arab Airlines	2(I)
04/08/1975	South African Airlines hit by small arms fire	
05/24/1978	Explosion of Kenyan Aircraft in flight	4(K)
09/03/1978	SAM-7 Missile attack on Rhodesian Airliner	48(K)
02/12/1979	SAM-7 Missile attack on Rhodesian Airliner	59(K)
02/14/1979	Armed attack on Air Rhodesian Aircraft	
02/14/1979	Rhodesian Airport shelled	
10/13/1981	Attack on Air Malta at Cairo Airport	2(K) 8(I)
01/11/1984	Explosion at Zaire Airport	
10/03/1984	Explosion of UTA in Chad	27(I)
05/05/1987	Sudanese Aircraft shot down	
03/01/1988	Explosion of BOP(South African Airliner)	17 (K)
09/19/1989	Explosion of UTA over Niger	171(K)

The first sabotage bomb attack against an African aircraft occurred on November 22, 1966, when an Aden Airways aircraft was affected by an explosion which destroyed the aircraft near Aden. The explosive device was detonated in a hand luggage area on the port side of the passenger cabin after the

aircraft reached six thousand feet. As a result, all 28 people on board were killed.³⁸⁷ Although, a similar such attack occurred on March 14, 1970, when a United Arab Airlines aircraft was blown up, sabotage attack was not considered a serious problem until the late 1970s in this region.

In the late 1970s, some guerrilla organizations exploited a new tactic, surface-to-air (SAM) missile attack against civil aviation. This form of attack in Africa took place on September 3, 1978, when, under the growing intensity of internal warfare between the Rhodesia Transitional Government, which was established in April 1978, and Patriotic Front,³⁸⁸ the Zimbabwe People's Revolutionary Army (ZIPRA) under Joshua Nkomo's Zimbabwe African People's Union (ZAPU) shot down a Rhodesia Air Viscount airliner, on a flight from Kariba to Salisbury, with SAM-7 (Strela) rocket. As a result of the attack, 30 people were killed in the crash and 10 of the 18 survivors were shot dead by guerrillas.³⁸⁹ It was reported that the missile used by guerrillas had been supplied by the Soviet Union and Cuba.³⁹⁰ Two more Rhodesian airliners were shot down by SAM-7 in February 1979, and 59 people were killed.³⁹¹ Another missile attack occurred in Sudan on August 16, 1986, when a Sudan Airways aircraft was shot down over rebel-held southern Sudan, killing all 57 people aboard.³⁹² Several missile

³⁸⁷ Edward F. Mickolus, op.cit, P. 72

³⁸⁸ Keesing's Contemporary Archives, February 9 and April 27, 1979, PP. 29437-29445 and 29576-29579

³⁸⁹ Ibid, P. 29440-29441

³⁹⁰ Ibid

³⁹¹ Ibid, P. 29577

³⁹² U.S. Department of Transportation, Criminal Acts against Civil Aviation: 1986, P. 15

attack incidents indicated that terrorist and guerrilla groups had already adopted the SAM as part of their armouries. This type of attack against civil aviation will be discussed in detail as a potential future threat in Chapter V.

One of the most serious acts of violence against civil aviation in Africa occurred in September 19, 1989, when a UTA DC-10 airliner was destroyed in mid-air over Niger's Tenere desert, killing all 171 people on board. The UTA began its journey in Brazzaville, Congo and made a stop in N'Djamena, Chad. Less than an hour after it had departed from N'Djamena, the aircraft suddenly disappeared in calm weather without making any radio distress calls.³⁹³ The wreckage of the aircraft was found the next day and the fact that the debris were scattered over an area of more than 60 miles, indicated that the explosion was very powerful and occurred at a high altitude.³⁹⁴ Subsequently, French officials determined that the crash was caused by an explosion and later announced that the type of bomb used in the attack was similar to that used in the bombing of a Pan Am 103 flight over Lockerbie.³⁹⁵

A day after the incident, callers in London and Paris claimed that Islamic Jihad had bombed the UTA in retaliation for Israel's abduction of Sheikh Obeid, a Shia cleric taken forcibly by Israeli commandoes from his home in southern Lebanon in late July 1989 and jailed in Israel. In addition, they warned France to exchange no more information regarding Sheikh Obeid with the Israelis, and demanded the release of Sheikh Obeid.³⁹⁶ In responding to these claims, French

³⁹³ The International Herald Tribune, September 20, 1989

³⁹⁴ Facts on File, September 22, 1989, P. 688

³⁹⁵ The Times, September 23, 1989

³⁹⁶ The International Herald Tribune, September 21, 1989

officials said that they could not authenticate the calls because Islamic Jihad usually made its claims in statements in Arabic to news agency in Beirut and included photographs of Western hostages.³⁹⁷ A few days later, on September 24, 1989, a note delivered to the offices of a news agency in West Beirut by the Clandestine Chadian Resistance, claimed responsibility for the UTA bomb attack, and said that "the struggle would continue until the complete withdrawal of all military forces from Africa".³⁹⁸ French officials could not exclude this claim because a Chadian group had claimed responsibility for a bomb attack in Chad on Air France in 1984.

Meanwhile, Professor Paul Wilkinson precisely predicted the possibility of Libyan involvement in the following words: "In view of Gaddafi's humiliating defeat during his intervention in Chad in 1982 there is clearly a real possibility that the Libyans instigated this terrorist attack against a French target".³⁹⁹ Wilkinson's sharp prediction turned out correct. A year after the incident, the conclusions of an inquiry into the UTA bombing were reported by the French weekly *Le Point* to have been suppressed. According to the *Times*, the report had established Libyan and Syrian involvement in the sabotage bombing, but the report had been withheld to avoid upsetting French diplomatic links with Libya and Syria.⁴⁰⁰ It was reported that the crash was caused by a bomb carried on board by a Congolese national, Appolinaire Managatany who had close links with the Libyans.⁴⁰¹ In addition, according to the investigation report of the

³⁹⁷ Ibid

³⁹⁸ Keesing's Contemporary Archives, September 1989, P. 36910

³⁹⁹ Paul Wilkinson, *Lessons of Lockerbie*, op.cit, P. 7

⁴⁰⁰ The *Times*, September 4, 1990

⁴⁰¹ Keesing's Contemporary Archives, September 1990, P. 37732

Peoples' Republic of the Congo, the Congolese government confirmed that the UTA disaster was the result of a crime committed by Libyan terrorists. This attack was the implementation of a plan which Libya had been developing since 1986 as a part of a series of actions within the framework of the conflict between Libya and Chad, with French involvement. Libya's goal was to strike against France at the very heart of its presence in Chad, and to escalate the conflict between Libya and that state.⁴⁰² Finally, twenty-four months later, a French investigation team indicated that high-level Libyan officials, including Musa Kusa, vice minister of Foreign Affairs, and Abdalla Sanoussi, second in command of the Libyan foreign intelligence service and Gadafi's brother-in-law, were involved in the attack.⁴⁰³ Subsequently, in October 1991, France issued arrest warrants for four Libyan suspects in connection with the UTA bombing.⁴⁰⁴ In addition, the U.N. Security Council ordered Libya to hand over to France the four Libyan suspects and the two Libyans alleged to be responsible for the Lockerbie bombing to either the United States or the United Kingdom. As Libya defied the Security Council's deadline to extradite the Libyan suspects, on April 16, 1992, sanctions were imposed against Libya, which are still in force.⁴⁰⁵

402 Peoples' Republic of the Congo, Ministry of Defence and Security, "Investigation Report", Brazzaville, June 3, 1990, in Libyan Sponsored Terrorism Exclusive Evidence. How They Do It: Names, Dates and Places, Political Warfare, No. 19, November 1991

403 Xavier Raufer, "Libya's Global Apparatus" in *Ibid*, P. 3

404 USIS, U.N. Urges Libya to Cooperate in Bombing Inquiries (Security Council resolution on Libya), EUR 204, January 22, 1992

405 The Scotsman, April 16, 1992

The improvement of security systems at major international airports means that terrorists can be expected to switch the entry points of bombs to more vulnerable Third World states. In the case of UTA disaster, Brazzaville, Congo was the entry point for the bomb.

III-7-1. The Responses and Problems of Aviation Security

After the Pan Am 103 disaster over Lockerbie, the security measures were put into effect at many international airports. However, the UTA incident highlighted that such measures for the safety of civil aviation were limited if terrorists could attack the system through vulnerable airports. The critical weakness of aviation security which manifests itself at many airports in less developed states was demonstrated by UTA disaster.

In an attempt to tackle the problem, African governments have adopted measures to reduce the number of attacks against civil aviation. Most of the African governments are now parties to international conventions, which have paved the way for many of the states in this region to pass anti-aircraft hijacking laws, to refuse landing rights to hijacked aircraft and to implement airline screening procedures to detect weapons.⁴⁰⁶ In addition, 23 states in Africa contributed to efforts to improve the worldwide level of safeguarding civil aviation by participating in the first major inter-state civil aviation security technical assistance project undertaken by ICAO in the early 1980s. Furthermore, fellowships were also given to appropriate African officials to

⁴⁰⁶ Patrick Edobor Igbinovia, "Terrorist Aircraft Hijacking and Sabotage in African States", International Journal of Comparative and Applied Criminal Justice, 1986, vol. 10, No. 1, P. 87

attend training courses at the East African School of Aviation(EASA) in Nairobi, Kenya and L'Ecole Africaine de Meteorologie et de l'Aviation civile(EAMAC) in Niamey, Niger.⁴⁰⁷

Despite these efforts, many airports in African states, however, have no fundamental aviation security measures. It is known that there are no fences around most of the airports in this region. Some African airports are used as paths by inhabitants for gaining access to neighbouring villages. Villagers near the Kano airport in Nigeria, for example, often cross the runway as a short-cut to gain access to the surrounding villages.⁴⁰⁸ Furthermore, Rodney Wallis, the former International Air Transport Association's Director of Security, precisely pointed out the reality of aviation security in this region as follows:

"At a certain African airport, security managers found gaps in the comparatively new perimeter fence. The missing wire was located a few miles from the airport serving very effectively as a holding pen for cattle. Locally, nobody appeared too alarmed or surprised by this".⁴⁰⁹

In these circumstances, it is very difficult to prevent unauthorised people coming into the airport. This might be in one of the poor states in Africa, but it is by no means exceptional. Rodney Wallis once again described the problem of aviation security at another African airport as follows:

"Consider events at yet another African airport where young sales boys were reported as regularly hawking their wares on the tarmac as passengers were boarding their aircraft, at times following prospective customers into the cabin. More alarming were reports received from captains at yet another

407 "ICAO actively pressing worldwide aviation security programme", ICAO Bulletin, July/August, 1982, P. 70

408 The Times, November 17, 1989

409 Rodney Wallis, "Aviation Security", Paper for Discussion at University of St. Andrews, October 10, 1991, P. 18

airport on the African continent that their aircraft were robbed during the taxiing procedure! Gangs approached the aircraft at points away from the main buildings, both during take-off procedures and after landing but when the aircraft were stationary or only just moving and opened the cargo doors to steal the contents!"⁴¹⁰

This reality destroys the concept of coordinated defences for the civil aviation industry. Although the governments in Africa recognise the serious threat of aviation terrorism, they lack the resources to give priority to aviation security. They simply cannot afford the outlay required to provide themselves national aviation security systems. One of the Chadian officials described the reality in African states as follows:

"We do not have the money to buy an extra machine for the hospital, let alone an X-ray for the airport".⁴¹¹

The UTA disaster demonstrated that while such inadequacy of civil aviation security exists in poor states, it will be impossible for the richer states to ensure the security of their civil aviation industries. It should be remembered that terrorist organizations are eager to find the easy way to place bombs and operatives into the civil aviation system. There is no doubt that the failure to take adequate global aviation security measures gained the UTA disaster a place in aviation history. In recent years, some aviation security experts have expressed a great concern over airport security in African states which offers easy access to terrorists. It is clear that the weakness of airport security in Africa poses a major threat to the safety of civil aviation at the present time. However, there is no sign of improvement.

⁴¹⁰ Ibid, P. 19

⁴¹¹ The International Herald Tribune, September 21, 1989

III-7-2. Closing Remarks

Acts of violence against civil aviation in African states are small in number when compared to those directed against the USA, West European and Middle Eastern states. However, most African airports are regarded by terrorists as soft and easy targets for their operation because there are no proper security measures. The problem of acts of violence against civil aviation in African states has been compounded by deficiency of technological know how, outdated security equipment, defective training of security officers, and inappropriate facilities in African airports.⁴¹² In this respect, without international efforts to extend and enhance global aviation security and to provide the means for even the poorest states in Africa to set up reasonable aviation security systems. It is difficult not to imagine that acts of violence against civil aviation in Africa may begin on a large scale in near future.

III-8. Conclusion

As has been examined in this Chapter, acts of violence against civil aviation are not limited by geographical or political boundaries. In addition, no airline in the global village is exempt from such attacks. In the very early stage, there was little to be learned from the acts of violence against civil aviation, for they followed no discernible pattern and, geographically, were widely scattered. The motivation for the attacks could be identified as falling into two categories:

⁴¹² Patrick Edozor Igbinovia, *op.cit*, P. 88

asylum seeking in Eastern Europe and extortion in the West. Until politically motivated terrorists adopted the tactic for their political ends, attacks against civil aviation were often seen in a positive light as a means of escape from the totalitarian regimes behind the iron curtain. This attitude gradually changed when aviation terrorism took a dangerous new turn. Civilian passenger aircraft were hijacked by politically motivated terrorists who were usually willing to sacrifice themselves for whatever cause they subscribed to. The long-term motivation of political terrorists is the furtherance of political objectives. To achieve long-term aims they often employ short-term tactics such as publicity for their cause, political blackmail, extortion of money, humiliating or discrediting a government or corporation, or coercing it to change its policies. In the Middle East, Western Europe, Latin America, and increasingly in Africa and Asia, the threat of acts of violence against civil aviation is posed by politically motivated terrorists. For example, civil aviation has become a military target in the Middle East conflict, and new extortion demands by terrorists for changes in a nation's foreign policies create agonizing dilemmas for governments whether directly or indirectly involved in the conflict. As political unrest continues around the world, it can be expected that the multi-operations of the civil aviation industry will bear the brunt of terrorist violence as the perpetrators will regard them as a attractive target.

Despite the increasing magnitude of the threat to the international community of attacks against civil aviation, no international consensus has been developed on how to approach aviation terrorism. Multilateral efforts to establish measures to combat acts of violence against civil aviation have failed to secure the support of many Third World states such as Libya, Syria, Iran and Iraq which advocate terrorism as a method of achieving national liberation. Political solutions were sought, but it was realized that the goal of international agreement would be

difficult and that the prospects for its rapid accomplishment were very poor and probably unattainable. Consequently, the international community, led by states having major civil aviation interest, had to develop comprehensive preventive and counter measures. Internationally the deterrent or diversionary effect of security measures have been reflected in a perceptible shift of terrorist attention to soft targets or other forms of attack. For example, the high level of aviation security provided by the Israeli government for its national airline and airline facilities has denied easy access to Arab terrorists despite their high propensity to infiltrate and attack. Unfortunately, this has translated into a high risk for other flag carriers. The trend toward attack upon Third World states attests in part to the effectiveness of anti-aviation terrorism measures being taken by states which have major civil aviation industry. This implies that even with the best security system for countering aviation terrorism, if there is any single loophole, terrorist will find and exploit it.

The tightening of airport security in major civil aviation states has greatly reduced the threat, but this security system is not impregnable. The following Chapter will examine the specific problems concerning the safety of civil aviation through the case studies in selected incidents.

CHAPTER IV

CASE STUDIES IN SELECTED INCIDENTS

"Many passengers do not apparently realise that aviation terrorism acts now vie with technical failure and pilot error as a major cause of fatalities in civil aviation. Moreover, when a case of technological failure, freak weather conditions or pilot error occurs, there is a real chance of at least some of the passengers and crew getting out alive. Mid-air sabotage bombing at high altitude is a total catastrophe: no one has a chance of getting out alive".¹

"Use of sophisticated timing and other devices by terrorists and which were capable of evading discovery during screening process will demand responsive action by aviation security specialists".²

IV-1. Introduction

This Chapter will focus on two different types of attacks against civil aviation in order to analyse both the threat and the response to that attack and to identify specific problems relevant thereto. Although many cases of acts of violence against civil aviation could be used to illustrate the problems and difficulties encountered by civil aviation security, the responses made to counter that violence, and the threat to which the international community is subject, the following two case studies suffice to provide an invaluable and critical analysis.

¹ Paul Wilkinson, "The Lessons of Lockerbie", International Security Review, January/February 1990, P. 23

² Rodney Wallis, "Baggage Security", FAA's Fifth International Civil Aviation Security Conference, October 24-27, 1988, P. 2

At the same time, this Chapter is designed to provide a useful outline of the future prospects facing international responses to aviation terrorism.

IV-2. TWA 847 Hijacking

The hijacking of the TWA 847 in June 1985 showed the international community that commercial aircraft and the aviation industry in general would remain a target of terrorists for as long as they sought to achieve their objectives by terrorizing the innocent in order to emasculate the mighty. This should have been predicted since aircraft hijacking had earlier been shown to have all the elements necessary to make it a useful medium for terrorists. They can use the passengers as hostages for bargaining purposes and good media coverage is almost always assured. The significance of the TWA hostage crisis is that passengers and aircraft became mere pawns in the larger game of international crisis. Governments have become the principal targets and attacks against airlines have become a major terrorist tactic. Unlike any previous incident, the hijacking of TWA 847 was a very complicated and confusing event because of the lack of effective authorities with whom the involved parties could deal. In fact, the Lebanese authorities had no real influence with which to control the hostage crisis owing to the unstable political situation. Consequently, the TWA crisis was resolved primarily by diplomatic means between the states concerned rather than by negotiation directly with the hijackers. The situation showed that the procedures developed over previous decades to deal with this type of situation proved inapplicable. At the same time, the event presented considerable dilemmas for the United States and Israel through the hostage crisis. Although hijacking by politically motivated terrorists had been contained since the late

1970s, the TWA incident provided a salutary reminder that the serious threat of this type of aircraft hijacking can never be underestimated. After a chronological survey of the facts of the incident, the actions and intentions of the parties involved in the hostage crisis are presented. In addition, this case study embodies a review of the possible suggestions pertaining to these problems which may serve to deter and prevent such a form of aviation terrorism in the future.

IV-2-1. The Facts of the Incident

On June 14, 1985, a Trans World Airlines (TWA) flight 847, carrying 153 passengers and crew, was hijacked shortly after take off from Athens en route to Rome by two Shia Muslim terrorists armed with a pistol and hand grenades.³ The hijackers intended to force the pilot to fly to Algiers, Algeria. However, when told by the captain that the aircraft did not have sufficient fuel to fly to Algiers, the hijackers then changed their destination to Beirut where 17 American women and 2 children were released.⁴ At Beirut International Airport, officials did not want to get involved in a hijacking crisis, and so they blocked the airport runway with buses and other obstacles. The hijackers and captive pilot, however, had no choice but to land in Beirut because of shortage of fuel.⁵ On landing at Beirut airport, the hijackers demanded the release of more than 700 detainees, mostly Lebanese Shias but also including Palestinians who had

³ For full story of this incident, see John Testrake, Triumph Over Terror on Flight 847, Sussex, UK: Kingsway Publications, 1987; The Times, June 15, 1985

⁴ John Testrake, Ibid, P. 70

⁵ The Times, June 15, 1985

been transferred from southern Lebanon at the beginning of April 1985, to the Atlit detention camp in north-east Israel.⁶ At Beirut the aircraft was refuelled as the hijackers had ordered and took off for Algiers, on the same day, with up to 10 more terrorists who had joined the aircraft on its arrival at Beirut.⁷ After five hours of negotiations between the hijackers and Algerian negotiators, accompanied by U.S. embassy officials, at Algiers airport, the aircraft took off late that day for Beirut again. Twenty passengers, including 17 women and 2 children had been freed minutes before.⁸ In Beirut, the hijackers asked to speak to an Amal official. However, the Amal militia made no response.⁹ To show their seriousness, the hijackers responded by murdering an American passenger, a U.S. Navy diver, and throwing his body onto the tarmac.¹⁰ Moments later, Amal officials and their body-guards boarded the plane. As negotiations proceeded, the hijackers asked that all airport lights be turned off. In fact, they wanted darkness in order to bring aboard about ten additional terrorists with arms and ammunition as reinforcements and to remove some passengers with Jewish-sounding names to a secret place controlled by Hezbollah in order to

⁶ The Shia detainees in Atlit camp in Israel were the remainder of the original contingent of 1,200 prisoners driven in blacked-out buses south across the boarder on April 2, 1985, the day before the closure of the Ansar prison camp in southern Lebanon. The Israeli action was confirmed internationally as being in breach of the fourth Geneva Convention covering the treatment of prisoners in the time of war.; see The Times, June 15, 1985

⁷ The Daily Telegraph, June 17, 1985; The Times, June 17, 1985

⁸ The Times, June 15, 1985

⁹ The Times, June 16, 1985

¹⁰ The Daily Telegraph, June 17, 1985; Newsweek, June 24, 1985, P. 13; Keesing's Contemporary Archives, January 1986, P. 34130

prevent any future rescue operation.¹¹ The hijackers also demanded that Ali Atwa, who had been arrested at Athens airport after his two accomplices had commandeered the TWA 847, be released by the Greek authorities and brought to Algiers. Otherwise, they threatened that they would kill all seven Greeks on the plane.¹²

On June 15, the aircraft took off from Beirut airport and landed at Algiers for a second time. Soon after the TWA 847 landed in Algiers, two Algerian officials came aboard for negotiations which were evidently successful. The hijackers released 67 hostages including seven Greek passengers in exchange for the release by the Greek authorities of an accomplice of the hijackers, Ali Atwa who had been arrested at Athens airport.¹³ That evening, the hijackers announced that if their demands were not met by the following morning, they would fly to an unspecified destination, and destroy the aircraft with its remaining passengers.¹⁴

However, on June 16, the aircraft flew for the third time to Beirut airport. The hijackers demanded to see Mr Nabih Berri, the leader of the Amal Militia and the Justice Minister in the fragmented Lebanese government, for negotiations.¹⁵ The hijackers' repeated emphasis on seeing officials of Amal, the mainstream of the Shia organization, in fact, suggested not only that they were seeking a negotiated settlement but also that their motivation may have been

¹¹ Time, June 24, P. 28; The Times, June 17, 1985

¹² The Times, June 17, 1985

¹³ The Times, June 17, 1985; Keesing's Contemporary Archives, Jan. 1986, P. 34130

¹⁴ The Times, June 17, 1985

¹⁵ Time, June 24, 1985, P. 28

essentially political rather than ideological. The hijackers also urged the International Committee of the Red Cross facilitate the release of the Shias in Israel and to do so expeditiously before it would be too late. The hijackers warned ominously that the next communique would be their last.¹⁶

In Beirut, the remaining hostages were taken off the aircraft, split into groups and driven into the city under the supervision of Amal, the mainstream Shia Muslim political and military force, after Mr Nabih Berri had agreed to a request by the hijackers to conduct negotiations on their behalf.¹⁷ Mr Nabih Berri announced, on June 17, that all the hostages had been transferred by the Shia militia from the TWA 847 to an undisclosed location in Beirut city for security reasons.¹⁸ He also indicated that he was responsible for the hostages, and that the American hostages were being guarded by his own Amal men as well as by the hijackers. At the same time, he made it clear that he could only guarantee the safety of the hostages as long as negotiations continued for the release of Shia detainees in Israel, and that hostages' release could only be achieved after the detainees were also free.¹⁹

As a gesture of generosity, on June 18, Mr Berri released three of the hostages and promised that the others would be freed in 24 hours if Israel returned the Shia prisoners to Lebanon. At the same time, he sympathised with the hijackers, saying that the Shia Muslim prisoners were as innocent as the

¹⁶ Ibid

¹⁷ The Guardian, June 18, 1985

¹⁸ The Times, June 18, 1985

¹⁹ The Guardian, June 18, 1985; The Times, June 19, 1985

Americans hijacked on the plane, yet the U.S. Government did not intervene to help them.²⁰

On June 22, the Shia militia warned that its mediation efforts in the TWA hijack crisis would end in a few days unless Israel agreed to free the Shia prisoners. The warning came amid rising tension as unidentified war planes flew over Beirut and as the Amal leader Nabih Berri accused the United States of preparing for military action. At the same time, Amal insisted that it was not behind the hijack and became involved only after the original hijackers threatened to shoot more passengers unless Berri agreed to act as a mediator.²¹ Amal's veiled threat to withdraw from the crisis was clearly designed to put more pressure on the U.S. administration. With the situation in Beirut still in deadlock, angry exchanges between Israel and the United States intensified. Israel accused the Reagan administration of attempting to influence public opinion against Israel, while publicly urging Israel not to give in to the hijackers' demands.²² On the other side, the United States accused Israel of violating the Fourth Geneva Convention, which covers the treatment of prisoners, when it moved the Shias out of southern Lebanon.²³

Under strong pressure from United States, Israel announced, on June 23, that it would release 31 Shia prisoners, but denied that the move had any connection whatsoever with the TWA hijacking.²⁴ An Amal official reacted to the

²⁰ The Times, June 19, 1985

²¹ The Observer, June 23, 1985

²² The Sunday Times, June 23, 1985

²³ Newsweek, July 1, 1985, P. 16

²⁴ The Times, June 24, 1985

announcement by saying that so far there were no plans to release any of the hostages in return for the 31 Shias.²⁵ President Reagan also said that the release of prisoners by Israel was nothing to do with the hostages' release.²⁶ The TWA hijack crisis appeared to be destined for a period of deadlock after the Amal movement's refusal to consider Israel's release of 31 prisoners as a mechanism which might be used to lead to the eventual freeing of the hostages.

In what it insisted was an unrelated move, the Israeli government, on June 24, freed 31 prisoners.²⁷ During the ensuing five days there were intense and largely clandestine contacts between Syrian and Iranian officials and representatives of Amal and Hezbollah, between the U.S. and Syrian governments and U.S. and Israeli leaders.²⁸ Among those personally involved were Mr Berri, Shaikh Mohammed Hussein Fadlallah, the spiritual leader of Hezbollah, the group alleged to have hijacked the aircraft, President Assad of Syria and Hojatolislam Hashemi Ali Akbar Rafsanjani, the Speaker of the Iranian parliament, who on June 25 condemned the hijacking and said that Iran would have attempted to prevent it, had the Iranians had advance knowledge.²⁹ However, some reports suggested that the Hezbollah group which originally hijacked the TWA was part of a pro-Iranian movement that received much of its funding through the Iranian Embassy in Damascus.³⁰

²⁵ The Guardian, June 24, 1985

²⁶ The Daily Telegraph, June 24, 1985

²⁷ The Guardian, June 25, 1985; The Times, June 25, 1985

²⁸ The Times, June 24 and 26, 1985

²⁹ The Times, June 26, 1985

³⁰ The Times, June 24, 1985

In this context, a hostage who had become ill was freed on June 26. At the same time, Mr Berri offered to transfer all the hostages under his control to a Western embassy, specifically mentioning the French, Swiss and Austrian Embassies, in Beirut, pending the release of the Shia prisoners.³¹ Mr Berri's intention appeared to be to shift at least some of the responsibility for the safety of the hostages. In fact, this suggestion by Mr Berri followed the warning of the United States, on June 24, that if diplomatic moves failed, it would consider other measures, including attempting to cut off goods and services to Beirut.³² In addition, it seemed also likely that Mr Berri, irritated by President Assad's pressure, merely wanted to embarrass the Syrian leader.

On June 27, Syria pledged that it would help to end the ordeal of the TWA hostages after Mr Berri had failed to reach agreement to move the hostages to the French Embassy in Beirut. Syrian officials said that Syria was ready in principle to receive the passengers from the hijacked aircraft.³³ Another plan to resolve the American hostage crisis seemed to appear, on June 28, as U.N. officials tried to arrange for the near-simultaneous release of Shia prisoners by Israel and the transfer of 39 hostages in Beirut to Syria. But Amal officials indicated that they would still much prefer the hostages to be moved to a Western embassy in Beirut.³⁴

On June 30, escorted from Beirut by Lebanese Shia gunmen and then by squads of Syrian military police, the remaining 39 American hostages, including

³¹ The Financial Times, June 27, 1985

³² The Times, June 26, 1985

³³ The Daily Telegraph, June 29, 1985

³⁴ The Times, June 29, 1985

the four who had been held by Hezbollah, were driven to freedom and safety in Damascus, from where they were flown to Frankfurt.³⁵ Their release followed a personal guarantee from President Assad to Mr Berri that the Atlit detainees would shortly be set free. The guarantee was reportedly based on assurances which President Assad had received to this effect from the U.S. administration, which in turn had received confirmation from the Israeli government that the release of Atlit detainees would take place in the near future.³⁶ It was believed that President Assad also secured an assurance from the U.S. administration that neither they nor the Israelis would carry out retaliation against the Shias in Lebanon. In what had been seen as an undertaking not to retaliate, the U.S. State Department had announced on June 29 that it respected Lebanese sovereignty and supported the preservation of security and stability in the State.³⁷

On July 3 a further 300 Atlit detainees were released into southern Lebanon. Israeli officials said that their release had been delayed as a result of the TWA hijacking. The remaining 435 detainees were released in batches of about 100 each on July 24, August 13 and 28, and September 10, 1985.³⁸

One of the most troubling aspects of the plight of the TWA hijacking was that it was the third hijacking that had occurred in the region within three days from June 11 to 14, and the second one apparently engineered by Lebanese Shias. In earlier times, Arab hijackers tended to be a Palestinian, from one or other

³⁵ The Times, July 1, 1985

³⁶ Ibid

³⁷ Keesing's Contemporary Archives, January 1986, P. 34130

³⁸ Ibid; The Daily Telegraph, July 4, 1985; The International Herald Tribune, August 14, 1985; The Times, August 29 and September 11, 1985

factions of the PLO, attempting to advance or at least dramatize the Palestinian cause. The politicisation of Lebanon's Shia Muslim community was one of the most significant and most troubling consequences of the Israeli invasion. The first hijacking had begun on June 11, 1985, when six Shia terrorists armed with automatic weapons and explosives, stormed aboard a Royal Jordanian Airlines B-727 aircraft carrying 74 people at Beirut airport. They overpowered the Jordanian security guards, then ordered the pilot to fly to Larnaca, Cyprus.³⁹ The political implications behind the hijack were extremely serious. It was, in effect, an act of overt aggression against the Jordanian Government and against those other Arab states which supported Yasir Arafat's leadership of the PLO. The hijackers condemned not only Jordan but also the Arab League for their criticism of the Shia Muslims besieging the Palestinian camps in Beirut, and demanded the evacuation of all armed Palestinians from the Beirut camps, which had themselves been under siege by Shia Muslim Amal militiamen for 24 days.⁴⁰ In fact, the Shias wanted to drive out the Palestinians to make sure that the PLO would never again be able to set up a state within a state in Lebanon. After several dire threats, the hijackers freed the passengers and blew up the aircraft. The hijackers subsequently made their escape over rough ground beside the airport runway, untouched by the local Amal militiamen who were in control of the area.⁴¹

Several released passengers then boarded the first plane they could catch out of Beirut, a Middle East Airlines flight to nearby Cyprus. But a young

³⁹ The International Herald Tribune, June 12, 1985; The Guardian, June 12, 1985; The Daily Telegraph, June 12, 1985

⁴⁰ The Times, June 13, 1985;

⁴¹ Ibid

Palestinian terrorist armed with a hand grenade hijacked the aircraft moments before it landed at the Larnaca airport. The hijacker stated that he had seized the aircraft in retaliation for the earlier ALIA aircraft hijacking. He soon agreed to end the hijacking after being granted his request to fly to Amman aboard a Jordanian airliner.⁴²

These were the conditions that had produced the nightmare of the TWA 847 hostage crisis. In fact, Beirut's war of the camps between Amal Shia Muslims and Palestinian was transferred to the air.

IV-2-2. Analytical Discussion of Event, Actors and Outcome

IV-2-2-1. The Hijackers

In analysing the implication of the TWA 847 hijacking which illustrated the terrorists' strategy, it is essential to note what an exceptional challenge this type of terrorists can present to the parties involved and to the liberal states. The terrorists' firm intentions, persistent ability to control the situation, mass media utilization, and exceptional confidence were demonstrated throughout the event. This indicated that aircraft hijacking by politically motivated terrorists could produce great difficulties for international society.

The hijackers were identified as members of Hezbollah, which is comparable with the main Shia Fundamentalist movement in Lebanon.⁴³ Hezbollah appeared as a result of the merger of Husayn Musawi's Islamic Amal and the Lebanese

⁴² Newsweek, June 24, 1985, P. 30

⁴³ The Guardian, June 18, 1985; Time, June 24, 1985, P. 25

branch of the Da'wa Party in 1982.⁴⁴ The organization is a social, political, and military movement that gives focus and general identity in Lebanon to Ayatollah Khomeini's Islamic militancy. Through this connection, Hezbollah's ties to Iran are important in so far as Iran provides political indoctrination, financing and ideological support, though it is an over-simplification to claim that Tehran controls all the activities of the Islamic groups in Lebanon.⁴⁵

Throughout the hijacking crisis, one of the main objectives of this TWA hijacking was the release of more than 700 Lebanese Shias held at the Atlit detention camp in north-east Israel. Obtaining freedom for those people was certainly only one part of the hijackers' intention, since the Israelis claimed that they were about to release the Lebanese prisoners, and the hostages were eventually released before the release of Lebanese prisoners. The TWA 847 hijacking occurred at least in part because the Hezbollah sought to win credit for the Lebanese prisoners' release in order to gain an advantage over the other nationalist organizations such as the Amal militia.⁴⁶ At the same time, those who organized the hijacking of the TWA 847 would have recognized from past experience that their operation, if successful, would again expose the inability of the United States to prevail against them. Accordingly, the terrorists would strike another great blow against their enemy and for the spread of Shia fundamentalism. The hijackers also demanded that Ali Atwa, who had been arrested at Athens airport after his two accomplices commandeered the TWA

⁴⁴ U.S. Department of Defence, Terrorist Group Profiles, P. 15

⁴⁵ Ibid; Further reading on Hezbollah, see Marius Deeb, "Shia movements in Lebanon: their formation, ideology, social basis, and links with Iran and Syria", Third World Quarterly, Vol. 10, No. 2, 1988, 692-698

⁴⁶ Alvin H. Bernstein, "Iran's Low-Intensity War against the United States", ORBIS, Spring 1986, P. 159

847, be released by the Greek authorities and brought to Algiers. Otherwise, they threatened that they would kill all seven Greeks on the plane.⁴⁷ In this situation, the Greek authorities submitted, with ease, to the hijackers' blackmail for the release of their own nationals. They obviously did not make any efforts to secure the release of all hostages by close cooperation with other national authorities. The Public Order Minister of Greece said, without any qualms, that he was delighted the decision to yield to the hijackers' threat to kill seven Greek passengers unless their comrade was freed led to the release of 50 hostages.⁴⁸ Ali Atwa was flown to Algiers on June 15 on a special Olympic Airways flight. Greek action provided encouragement to the terrorists and signified to the terrorists that hostages constitute a most valuable weapon with which to bargain and secure their aims. In addition, it was reported that the hijackers wanted the release 17 Hezbollah terrorists who had been arrested and taken into custody in Kuwait prison for bomb attacks in Kuwait on December 12, 1983. One of the 17 prisoners was the brother-in-law of Imad Moughnieh who had planned the hijack operation.⁴⁹ However, the hijackers abandoned this attempt, because they recognized that the Kuwait government would not easily surrender to their blackmail. In fact, the Kuwait government maintained a hardline policy when dealing with aviation terrorists. This was demonstrated in 1988, when a Kuwaiti airliner was hijacked by Hezbollah. Despite the murder of two of its citizens during the 16-day ordeal and the presence of three Royal Family members

⁴⁷ The Times, Ibid

⁴⁸ Ibid

⁴⁹ Robert Fisk, Pity the Nation: Lebanon at War, Oxford: Oxford University Press, 1991, P. 605; For bomb attacks in December 1983, see Edward Mickolus, Todd Sandler, and Jean M. Murdock, op.cit, PP. 465-467

among the hostages, the Kuwaiti government steadfastly refused to meet the hijackers demand for the release of the convicted terrorists. The 17 Kuwaiti prisoners became important pawns in the game of international terrorism. Their release had been demanded on numerous occasions by the Hezbollah including the Kuwaiti airliner hijacking in December 1984.⁵⁰ The attempt to release the 17 prisoners held in Kuwait was made once again in April 1988, when a Kuwait airliner was hijacked by Hezbollah. The principal aim of the Kuwaiti airliner hijacking was also the release of the 17 prisoners.⁵¹ This demand, finally, became overtaken by events through the Iraqi invasion of Kuwait and the disappearance of the prisoners from the Kuwait gaol.

One of the most important objectives in hijacking the TWA 847 was to gain publicity for and so draw public attention to the cause espoused by the hijackers. On a political level, the hijackers demanded the immediate withdrawal of Israeli forces from southern Lebanon and international condemnation of the U.S. and Israel.⁵² In a broader sense, the Shias of Lebanon, radicalized by the violence following the Israeli invasion of June 1982, were seeking fairer treatment after generations of neglect and discrimination by Lebanon's wealthier and more powerful Maronite Christians and Sunni Muslims.⁵³ In addition to that,

⁵⁰ The Sunday Times, April 10, 1988

⁵¹ The Independent, April 6, 1988; For further information concerning Kuwaiti airliner hijacking, see Robin E. Hill, Problems of International Cooperation to Improve Standards of Aviation Security with Reference to the Passengers, Ph.D. Thesis, University of St. Andrews, 1990, at Chapter 3

⁵² The Times, June 16, 1985

⁵³ For further information concerning conflict among Lebanon's main religious groups, see Bruce Hoffman, Shi'a Terrorism, the Conflict in Lebanon and the Hijacking of TWA Flight 847, Santa Monica: RAND, July 1985

Shias, inspired by the example of the Iranian revolution, intended to destroy the last vestiges of Western decadence in the Islamic world, particularly the presence of the United States.⁵⁴ In fact, the 753 Shia prisoners were expected to be released by Israel, according to the international law. However, by demanding the release of the Shia prisoners, the hijackers attempted to appeal the world public opinion and turn it against the Israeli Government who were holding the Shia prisoners contrary to international law. And inevitably the hijackers claimed the entire credit for the Shia prisoners' release. To achieve the prisoners release, the hijackers effectively utilised the mass media. As the hijacking crisis progressed, removing the passengers with Jewish-sounding names to a secret place controlled by the Hezbollah made it possible to gain a great deal of U.S. media coverage. In addition, the series of chaotic press conferences may have been intended to regain media interest at a time of inactivity during the hostage crisis. The hijackers also set a deadline each time to intensify the effect of their threats, and this focused the attention of the mass media more sharply on their cause.

As the hostage crisis progressed, the hijackers felt uneasy about their own safety. By their actions, the hijackers had shown themselves to be worried about a military rescue attempt from the start. This was intensified by the very real possibility of a military rescue operation by U.S forces. In fact, as public anger and worry about hostage safety mounted, there were loud calls for a swift military response to free the hostages. The U.S. anti-terrorist unit, Delta Force, was ready to carry out a rescue operation.⁵⁵ Britain also dispatched a team of about 5 SAS troops to Cyprus to keep watch on events, even though there was

⁵⁴ Newsweek, June 24, 1985, P. 25

⁵⁵ The Times, June 17, 1985

no question of them taking part in the events.⁵⁶ However, from the outset, the hijackers appeared to be one jump ahead of any action planned against them. The well-trained terrorists assumed that the chance of a military response would decrease as the number of American lives at risk increased. For their safety, the hijackers transferred the passengers with Jewish-sounding names to safe houses controlled by Hezbollah to prevent such operation.⁵⁷ In addition, to put pressure on the U.S. government to desist from any rescue operation, they sent a letter signed by the American hostages, to President Reagan. In this letter, twenty-nine American hostages held aboard appealed to Reagan to meet the hijackers' demands and refrain from any military operation.⁵⁸ At the same time, during the negotiations in both Algiers and Beirut, the hijackers would move on to another airfield, just as the negotiators were beginning to feel confident that a solution was near, or when rescue operation forces were in a position to storm the aircraft.

At every stage in the hostage crisis, the well-trained hijackers held the initiative, and the most disturbing aspect of the hijack was the sophisticated understanding of counter-terrorism methods demonstrated by the hijackers. The terrorists had adapted to the Western counter-terrorist capability from their own sources. In addition, terrorists had profited from the bitter lessons of Entebbe and Mogadishu that the longer they stayed in one place the more vulnerable they were to a military rescue operation. They also knew that the chances of a rescue attempt increased dramatically once they murdered a hostage. By moving frequently and splitting up the hostages, the terrorists multiplied the obstacles

⁵⁶ The Guardian June 18, 1985

⁵⁷ The Times, June 17, 1985

⁵⁸ Ibid

facing a rescue force. In addition, terrorists had learned that hostage-taking in a hijack situation was the weapon of choice when directed against Western governments. The terrorists recognized that by holding Western hostages they had a better position for negotiation, since the political and social tradition from which they came placed quite a different value on human life in such a crisis. There is little doubt that the attitude of the Western governments to hostages has affected the calculations of terrorists vis-a-vis the effectiveness of hostage-taking as a tactic.⁵⁹ In fact, the large number of hostages gave the politically motivated hijackers immense bargaining power during the TWA 847 crisis. The hostage taking tactic appeared once again in 1988, when a Kuwaiti airliner was hijacked by Hezbollah.

IV-2-2-2. U.S and Israeli Governments

Despite all the promises that the terrorists would be brought to justice, both before and during the TWA hostage crisis, the most powerful government in the world was once again made to seem powerless. Governments inevitably find it easier to react to the last threat than to protect against the next attack. Terrorism has a tantalising capacity to make every incident seem like an exception to the rules that ought to apply. In this respect, the TWA 847 hijack incident was unpredictable. The United States had set up a special task force at the State Department to coordinate efforts to secure the release of hostages with President Ronald Reagan taking charge of the TWA 847 crisis, on June 16. Reagan had been in touch with the governments of Israel and Lebanon. He also sent a

⁵⁹ Grant Wardlaw, Political Terrorism: Theory, Tactics, and Counter-Measures, Cambridge: Cambridge University Press, 1989, PP.152-157

message to President Chadli Benjedid of Algeria and President Hafez al-Assad of Syria requesting cooperation.⁶⁰ When the TWA 847 landed at Algiers airport, U.S. officials, who well remembered the important role played by Algerian diplomats in settling the Iranian hostages crisis in 1980, were hopeful that the hijacking could be resolved one way or another in Algiers.⁶¹ However, the aircraft took off for Beirut for a second time without outcome, beyond the release of 21 passengers.

The TWA aircraft hijacking could hardly have come at a worse time for the Israeli government. In fact, the crisis came as the Israeli government was still reeling from the barrage of criticism provoked by its prisoner exchange deal with a Palestinian terrorist organization. On May 20, 1985, about 1,150 prisoners, including some convicted of serious terrorist offences, were freed in return for only three Israeli soldiers captured in Lebanon in 1982 and held by the Popular Front for the Liberation of Palestine-General Command (PFLP-GC).⁶² One of the released terrorists was Kozo Okamoto, the sole survivor of the Japanese Red Army terrorists who killed 25 people in an attack at Lod airport, Israel, in 1972.⁶³ Israel's willingness for compromise in this case stood in glaring contrast to previous policy, which insisted on "no deal with terrorists". Both at home and abroad, the prisoner exchange deal with PFLP-GC undermined the credibility of Israel's hard line policy on international terrorism. At the same time, the government of Shimon Peres, already pushed to the brink

⁶⁰ Ibid

⁶¹ Time, June 24, 1985

⁶² The Guardian, June 17, 1985

⁶³ The Times, June 12, 1985

deal with terrorists, recognized that it could suffer a major setback if more concessions to terrorism were made.⁶⁴ As a consequence of their recent loss of face, the TWA hostage crisis found Israeli leaders less willing than ever to capitulate, or to appear to do so.

The Israeli authorities started to discuss the TWA 847 hostage crisis on June 16. Israel, in fact, had long planned its own initiative to release about 800 shia Muslim detainees held in a strictly disciplined Israeli detention camp at Atlit in north-east Israel.⁶⁵ However, the Israeli authorities were intensely and uncomfortably aware of the relationship between the TWA 847 hostage crisis and the controversial and disproportionate exchange. In political circles, Israel's stand on the TWA hostage crisis had been greatly complicated by its decision in May to free 1,150 prisoners. In this situation, Israeli officials were trying to find means of face-saving. On June 17, Israel broke its silence over the TWA hijack with an announcement that any initiative would have to come from the U.S. if the key demands of the hijackers were to be considered. The police Minister, Chaim Bar-Lev, said that the Israeli government did not consider it had to take any initiative on releasing the prisoners. But if a request to do so came from the proper level of the Reagan administration, it would have to be considered seriously.⁶⁶ In response to Israel's position, the White House spokesman, Larry Speakes, said the U.S. had not been in touch with Israel over the hijackers' demand. He also said as follows:

⁶⁴ Middle East International, June 28, 1985, P. 5

⁶⁵ The Times, June 17, 1985

⁶⁶ The Times, June 18, 1985

"we do not make concessions, we do not encourage others to make concessions, and we do not ask others to do what we would not do."⁶⁷

At this point, the United States had very few options. As public anger and frustration mounted, there were loud calls for a swift military response to free the hostages. The U.S. anti-terrorist unit, Delta Force, was ready to carry out a rescue operation, if necessary in either Algiers or Beirut, from U.S. Navy ships in the Mediterranean.⁶⁸ However, in an attempt to pre-empt such an operation, Western Embassy officials privately expressed their deep concern that a rescue bid could jeopardise the lives of passengers with Jewish-sounding names who, it was reported, had been taken to safe houses controlled by Hezbollah, on June 16.⁶⁹ Indeed, the hijackers had no lack of supporters at Beirut airport. As Beirut airport lies next to the Lebanese coast, it might have been geographically suitable for a rescue operation. However, it was an armed camp occupied by Nabih Berri's Amal movement. There was no doubt, that the Amal militia would have been on the terrorists' side had Delta Force carried out a rescue operation.⁷⁰ In short, the prospect of a successful military rescue operation was virtually nonexistent. The U.S. administration recognized that military action would only get the hostages killed, and turned to the prospects for a peaceful settlement. Moreover, as increased media attention focused on the personal anguish of returning ex-hostages and upon the families of those who remained captive, all of whom called for arranging a release of the hostages, it became

⁶⁷ Ibid

⁶⁸ The Times, June 17, 1985

⁶⁹ Ibid

⁷⁰ Richard Clutterbuck, Kidnap, Hijack and Extortion: The Response, London: Macmillan Press, 1987, P. 193

evident that the Reagan administration would be unable to let the remaining hostages languish indefinitely in captivity or be killed.

In the end, the U.S. authorities had no choice but to make a deal with Nabih Berri and President Assad of Syria, who had some influence and power over the Middle Eastern states. President Reagan's recourse to diplomacy, his unlikely acceptance of Syria as a negotiating intermediary, although his administration had in the past frequently denounced Syria as a sponsor of international terrorism, much of it directed against American interests, and his failure to attempt to secure a forcible release of the hostages, were contrasted with his criticisms of former President Jimmy Carter for having employed a similar approach during the Tehran hostage affair in 1980.⁷¹ Mr. Reagan and his officials had said so often that they would not allow their state to be humiliated by terrorists. However, they found themselves facing similar problems and the same realities limiting the action they could take.

As public anger rose amid mounting calls for swift retaliatory action, Reagan directed the American ambassador in Beirut to explore every avenue with Berri in an effort to free the hostages. The U.S. administration was apparently seeking a formula which could result in the release of Shia prisoners held by Israel and of the American hostages with the help of the Red Cross. The U.S. officials attempted to persuade the International Committee of the Red Cross (ICRC) to contact the Israelis in order to ascertain the status of the release of the Shia prisoners in Atlit, but the U.S. officials insisted that they were not asking the Israelis to do so nor were they giving in to the terrorist demands.⁷² On June 19,

⁷¹ Marc A. Celmer, Terrorism, U.S. Strategy, and Regan Policies, London: Mansell Publishing Limited, 1987, P. 25; Keesing's Contemporary Archives, September 1985, P. 33850

⁷² The Times, June 19, 1985

the ICRC, however, announced that it could not act as an intermediary between the United States and Israel, which had permanent and direct contacts with each other, to secure the release of prisoners held by Israel to end the TWA hostage crisis, but left open a possible neutral supervisory role if approached by the hijackers and Israel.⁷³

The dilemma faced by the U.S. authorities stemmed from the fact that the Israeli administration was still adopting a firm and unchanging attitude. Israeli officials said again that no direct request had yet been made by the United States to Israel to release the prisoners.⁷⁴ On June 21, five of the hostages were produced at a press conference at the airport, in an attempt by Amal to bring pressure to bear on American public opinion. The hostages appealed to President Reagan for a second time not to undertake any military action to secure their release, and urged Israel to free the Shia prisoners.⁷⁵ The U.S. subsequently played down the possibility of direct action, and shifted emphasis towards threats of sanctions against Lebanon.

The hijackers' main demand was easy enough to satisfy. They wanted the release of their brethren, Shia prisoners who had been destined to be set free before the incident started, from an Israeli prison camp. The US administration, which had promised to make no concessions could hardly demand one from an embattled ally, Israel. With tempers growing, the United States and Israel found themselves trapped in a squirrel's spinning wheel, each waiting for the other to suggest that the Shias be freed. Each side was afraid of losing face. To the last, they refused to compromise. Faced with the painful choice of either losing face

⁷³ The International Herald Tribune, June 20, 1985; The Times, June 20, 1985

⁷⁴ Ibid

⁷⁵ The Guardian, June 22, 1985

or losing U.S. support, the Israeli authorities began to edge towards compromise. Finally, the Israeli government announced the freeing of the detainees. The official statement insisted that their release had nothing to with the TWA hostage crisis and they were being set free as part of "ongoing policy". The Israeli authorities, however, seemed to have lost, and although they would perhaps have eventually released most of their prisoners in due course, they were forced to do so prematurely under embarrassing circumstances. When the U.S. administration was forced to negotiate for the freedom of American hostages, it was clear that all the rhetoric in the world could not replace relevant action. During the hostage crisis, the U.S. government lost ground in the battle against terrorism. The United States had done nothing to discourage terrorists from seizing other Americans in the future. It appeared that a major superpower, the United States, was impotent at the hands of a few, highly politically motivated terrorists.

Meanwhile, the U.S. actions after the resolution of the event appeared incapable of enforcing any punishment on those involved. Despite a last-minute pledge the night before the hostages' release not to retaliate against Lebanon, the U.S. administration's first action was to lash out against Beirut airport. On July 1, the day after the hostages were released, President Reagan ordered legal and diplomatic steps to try to shut Beirut airport, and the State Department announced that henceforth no Lebanese airlines would be allowed to fly to the United States and, in addition to Lebanese airlines, any airlines which continued to fly into Beirut would be denied American landing rights.⁷⁶ In fact, before the TWA hostage crisis was over, U.S. attention had turned to the problem of Beirut airport which was in fact a free-fire zone subject to no lawful, responsible

⁷⁶ The Financial Times, July 2, 1985

authority.⁷⁷ This situation augmented the terrorist threat to all civil aviation in Europe and the Middle East. One senior U.S. State Department official said that some 15 per cent of all aircraft hijackings in the past had begun, passed through or ended at Beirut airport.⁷⁸ Apart from the lack of substantive response which resulted from Lebanon's basic incapacity to take proper measures, it is notable that Lebanon was serving as a sanctuary for terrorists. American sanctions against Beirut airport, however, confronted difficulties. The fact that the Beirut airport was routinely closed for long periods because of fighting around it, that few airlines used it any longer and that the TWA hijacking did not originate there seemed to have little influence on the U.S. intention. In addition, the United States moves to close Beirut airport were, in fact, jeopardising efforts to secure the release of Western hostages in Lebanon. In response to the U.S. threat to isolate Beirut airport, Hezbollah, which claimed responsibility for the kidnapping of several Westerners including 7 Americans, warned that they would execute all western hostages held in Lebanon if the U.S. attempted to retaliate for the TWA hijacking to Beirut.⁷⁹ At the same time, the U.S. government received strong protests from 17 Arab League states and even many European states, including France, Switzerland and Greece, which announced that they would allow Lebanese airlines to go on flying to their states.⁸⁰ In this respect, the policies of western governments taken as a whole in the aftermath of

⁷⁷ Geoffrey M. Levitt, Democracies against Terror: The Western Response to State-Supported Terrorism, New York: Praeger Publishers, 1988, P. 59

⁷⁸ The Financial Times, July 3, 1985

⁷⁹ The Times, July 3, 1985

⁸⁰ The Guardian, July 5, 1985; The Daily Telegraph, July 6, 1985; The Times, July 6, 1985

the TWA 847 hijacking revealed some fundamental weaknesses in international counter-terrorism cooperation. The U.S Administration's move to isolate Beirut airport by calling for an international ban on the flights of Lebanese airlines had one small practical effect. Amid growing scepticism among its allies about the proposed boycott of Beirut airport as a haven for terrorists, the US government began to play down the sanctions aspect of its response to the TWA 847 hijacking, shifting to a lower-key approach that stressed security improvements at international airports.

IV-2-2-3. Amal Militia

Throughout the TWA crisis, Mr Nabih Berri conducted negotiations on behalf of the hijackers. At the early stage, Mr Nabih Berri and his Amal militia did not want to get involved in the TWA hijacking crisis, as relations with the Hezbollah had been growing worse since Husayn Musawi deserted from Amal and joined up with Shaykh Muhammed Husayn Fadlallah's Hezbollah when Mr Berri joined the Lebanese Coalition Government of Reconstruction in April 1984.⁸¹ Meanwhile, the Hezbollah had to persuade the Amal militia to cooperate because Beirut airport was completely surrounded by hostile militia, and the Hezbollah did not have any influence with any of them, and so the Hezbollah had no direct access to the airport.⁸² At the same time, Mr Berri was shrewd

⁸¹ Edgar O'Ballance, Terrorism in the 1980s, London: Arms and Armour Press, 1989, P. 43 and 48; For further concerning relations between Berri and Musawi, see Robin Wright, In the Name of God: The Khomeini Decade, London: Bloomsbury, 1990, PP. 114-115

⁸² Ibid, P. 43

enough to take advantage of the TWA hostage crisis for his own personal political ambitions. There could be no better chance to increase his international stature than to play the role of intermediary over the lives of U.S. hostages, even though he had his position as a leader of the principal Shia movement to think of, as well as his relations with the fundamentalist groups from whom the hijackers had emerged. Throughout the hostage crisis, Mr Berri had been required to face in many directions. Mr Berri intended that he would achieve Washington's goodwill by saving the lives of U.S. hostages, the support of the Shias of southern Lebanon by freeing their brethren from Israeli detention, the humiliation of Israel by forcing it to free its detainees, and, finally, the favour of Syria by sending the freed hostages off to Damascus.

IV-2-2-4. Mass Media

During the ordeal of the TWA 847 hostage crisis, the developments surrounding the event and the fate of the passengers dominated the world's headlines and burnt images of terrorism into the minds of millions around the world for more than two weeks. One of the most noticeable developments in recent years has been the increasingly skilful use of publicity by terrorist organizations. During the TWA hostage crisis, the hijackers were seen to be adept at organising press conference and handling requests for interviews. This particular incident showed a very sophisticated use of the media by the hijackers. According to Tony Atwater, the total number and duration of TWA 847 hostage reports by the American networks, ABC, CBS and NBC, amounted to 491 reports and 729 minutes over the seventeen-day period, from June 14 to

June 30.⁸³ These figures show that coverage was extensive and continuous during this crisis. In this respect, the hijackers gained the one thing which they aimed at, publicity. One of the most important aims of a terrorist operation is to gain publicity, and, in some cases, publicity is the sole aim. Walter Laqueur precisely made his point by saying that:

"the media are the terrorist's best friend. The terrorist's act by itself is nothing, publicity is all."⁸⁴

The freedom to publish rests on a general public interest expressed in terms of "right to know".⁸⁵ However, it is a palpable objective of some media segments to entertain, shock, amuse or otherwise affect the emotions of the audience.⁸⁶ Grant Wardlaw levelled the following criticism:

"The competitive nature of news gathering places an undue emphasis on the sensational aspects of terrorists events and makes entertainment of public violence rather than performing a public duty to inform."⁸⁷

During the TWA crisis, certain sections of the Western media were criticized for having entered into a symbiotic relationship with Amal militiamen, exchanging access to the prisoners for publicity which was seen as the lifeblood of terrorist

83 Atwater, Tony, "Network Evening News Coverage of the TWA Hostage Crisis", in Yonah Alexander and Richard Latter (ed), Terrorism & The Media: Dilemmas For Government, Journalists & The Public, New York: Brassey's, 1990, PP. 88-91

84 Robert Kupperman and Darrel Trent(ed), Terrorism Threat. Reality. Response, California: Hoover Institution Press, 1979, P. 332

85 Vernon Bogdanor(ed), The Blackwell Encyclopaedia of Political Science, Oxford: Blackwell Publishers, 1991, PP. 240-242

86 Grant Wardlaw, op.cit, P. 76

87 Ibid, P. 77

activity, broadcasting unedited interviews with hostages who were being held at gunpoint, in which the hostages appeared to express gratitude to their guards for good treatment and to extend sympathy for their cause, and for bribery to obtain access to individuals.⁸⁸ The inappropriate role of mass media during the crisis only made the involvement of governments more complicated and politically more perilous. Some of the U.S. hostage families complained by saying that "From the beginning, the administration's policy has been rhetoric and no action" and "Why did our government have to be so prideful and haughty, so afraid of losing face".⁸⁹ Reflecting on his network's coverage during the TWA hostage crisis, Lawrence Grossman, president of NBC News, sought justification and denied criticism in the following terms:

"Whether the television networks made the Reagan administration's job easier or harder it was simply not the right to judge their coverage. The networks do not work for the government; they are supposed to work for the public."⁹⁰

The public wanted to know where the hostages were and how their families were bearing up, and the networks told them. It is understandable that what is happening must be reported, and the better the reportage the more likely international societies are to understand the phenomenon with which they are confronted. The problem, however, is the fact that television coverage served to focus public concern on the hostages' human anguish. Without similar coverage that would have balanced the immediate problems of the hostages' safety with

⁸⁸ Edgar O'Ballance, op.cit, P. 49; The Times, June 17, 18 and 21, 1985; John Richard Thackrah, Encyclopedia of Terrorism and Political Violence, London: Routledge and Kegan Paul, 1987, P. 24

⁸⁹ Newsweek, July 8, 1985, P. 12

⁹⁰ David C. Martin and John Walcott, Best Laid Plans: The Inside Story of America's War against Terrorism, New York: Harper & Row, 1988, P. 190

the long-term problems that other innocent people will face if terrorists perceive that their tactic is effective enough, this is dangerous.

On some occasions, media coverage of a terrorist event creates the most serious problems by broadcasting information which may hinder the effective management of terrorist incidents, such as the movements of special security forces or possible tactical approaches. This may place the lives of hostages and security forces in jeopardy. When a Lufthansa aircraft was hijacked in October 1977, the terrorists heard radio broadcasts revealing that the pilot had managed to alert the outside about the number of hijackers by special signals. Subsequently, the hijackers killed the pilot in front of the passengers.⁹¹ In this case, the media contributed directly to the death of a hostage. On the first day of the TWA hijacking, the U.S. major Television news had reported that special security forces had been dispatched.⁹² The reports were picked up by a number of other news organizations and before long the whole world knew special forces was moving. This might have caused the terrorists to break off negotiations when the aircraft landed in Algiers for a second time. In Algiers, in fact, with the help of Algerian authorities and the International Committee of the Red Cross, it seemed that the TWA hijacking crisis was going to be settled. According to the U.S. Ambassador in Algeria Michael Newlin, Algerian officials told him they heard radio reports that the Delta force was on its way and speculated that the hijackers had heard the reports, too.⁹³ There is no doubt that the media coverage, in this case, made the hostage rescue operation impossible and the hijacking crisis far more difficult. The lesson to be drawn from the two

⁹¹ Edward F. Mickolus, *op.cit.*, P. 79

⁹² The Times, June 17, 1985

⁹³ David C. Martin and John Walcott, *op.cit.*, PP.181-182

incidents is that it is extremely important to withhold news of plans to deal with the terrorists until the incident has been resolved. If this can not be arranged, Professor Paul Wilkinson sounds the following warning:

"then the authorities will have to consider a total media ban from the airports and airport perimeter areas where a hijacked airliner is being held."⁹⁴

Terrorism offered a means for the underdogs of the world to break into prime time by creating a human drama no network could resist. Terrorists could shoot their way onto the air and the networks would take it from there as they spared no expense in the competitive battle to be the first to break the news. There is no way of playing down the hijack story of a jumbo aircraft. Terrorists are well aware of this phenomenon. For the future, greater attention should be paid by the media and others to the possible relationship between media coverage and terrorist activities with a view to formulating guide-lines governing the nature and extent of media coverage of terrorist activities.

IV-2-3. Analytical Discussion and World Reactions

Until late 1960s, there was little worldwide concern over aircraft hijackings and their impact on international civil aviation. However, with an increasing number of such incidents, the international community started to recognize the vulnerability of civil aviation to aircraft hijacking in the late 1960s. At this early stage, many governments including the United States and Communist states enacted stringent anti-hijacking laws. However, the real battle for international regulations and legislation to combat aircraft hijacking has been led by the

⁹⁴ Paul Wilkinson, *The Lessons of Lockerbie*, Conflict Studies, No. 226, December 1989, P. 22

United Nations and ICAO, with the former organization attempting to persuade member states to discourage aircraft hijacking by political, legal and other means and ensure the extradition or punishment of hijackers. ICAO performs the detailed work required to develop international conventions which may be considered a universal source of general international law. The first result of its efforts was the adoption of the Convention on Offences and Certain Other Acts Committed on Board Aircraft, generally known as the Tokyo Convention, in 1963. Although this Convention obligates the state in which a hijacked aircraft lands to restore the aircraft to those entitled to its possession, it does not deal with measures to deter aircraft hijacking. The Tokyo Convention was of value because it resolved key juridical questions and established a precedent for multilateral action against hijackers. But it did not come into force until it was ratified by the twelfth state, the United States, in 1969.⁹⁵ This leisurely rate of ratification reflected the general tolerance with which governments regarded the infrequent aircraft hijackings of the mid-1960s. However, the equanimity of the international community was dispelled in 1968. In that year alone 35 aircraft were hijacked. In September 1968, in the wake of increased incidents of aircraft hijacking and other attacks, the ICAO Assembly passed a resolution asking its council to study measures to cope with the problem of unlawful seizure of civil aircraft. In 1969, the ICAO Legal Committee prepared a draft convention that required contracting states to punish or extradite hijackers, but left to the states

⁹⁵ Seymour Maxwell Finger, "Security of International Civil Aviation: The Role of ICAO", Terrorism: An International Journal, Vol. 6, No. 4, 1983, PP. 520-521; Sami Shubber, "Is Hijacking of Aircraft Piracy in International Law?", BYIL, 1970, P. 194; Gerald F. FitzGerald, "Toward Legal Suppression of Acts Against Civil Aviation", in Narinder Aggarwala, et al, Air Hijacking: An International Perspective, International Conciliation, No. 585, 1971, PP. 45-51; R. P. Boyle, "Jurisdiction over Crimes Committed in Flight: An International Convention", American Criminal Law Quarterly, Vol. 3, 1964-65, PP. 68-71

themselves the discretion as to whether to initiate prosecution or extradite. This draft convention, the Convention for the Suppression of Unlawful Seizure of Aircraft, known as Hague Convention, was adopted at the Hague in December 1970. The Hague Convention was ratified by the required number of states and entered into force on October 1971.⁹⁶ In the early 1970s, the international community faced another problem with escalating terrorist violence against civil aviation. El Al offices and other airlines had been targets of sabotage attacks by politically motivated terrorists. The gravity of the problem was underlined by sabotage bomb attacks in flight. In order to encounter this situation, ICAO held a meeting in Montreal in June 1970, and urged member states to develop and implement tight security procedures to prevent such attacks. Consequently, ICAO adopted the Convention for Suppression of Unlawful Acts against the Safety of Civil Aviation, known as Montreal Convention, in Montreal in September 1970. It contains similar provisions for punishment or extradition as the Hague Convention but also deals with terrorist actions other than aircraft hijacking such as sabotage attacks.⁹⁷

The three international Conventions have gained wide acceptance. In 1970, only 32 states had ratified or conceded to the Tokyo Convention. By May 1978, the Hague Convention had 93 adherents and the Montreal Convention 86.⁹⁸ By 1990, the numbers of states party to the Conventions had risen to 138 for the Tokyo Convention, 142 for the Hague Convention and 143 for the Montreal

⁹⁶ Sami Shubber, "Aircraft Hijacking Under the Hague Convention 1970 - A New Regime?", *ICLQ*, Vol. 22, 1973, PP. 687-726

⁹⁷ C. S. Thomas and M. J. Kirby, "The Convention For the Suppression of Unlawful Acts Against the Safety of Civil Aviation", *ICLQ*, Vol. 22, 1973, PP. 163-172

⁹⁸ Seymour Maxwell Finger, *op.cit*, P. 522

Convention.⁹⁹ Although the increasing concern of most governments with aircraft hijacking and other threats to civil aviation is indicated by the pace of ratification, these Conventions contain too many ambiguities, and many states have not ratified the conventions.¹⁰⁰ Consequently these Conventions with their many limitations have failed to provide much of an effective barrier against aircraft hijacks and other attacks. In fact, even two decades after the adoption of the first international Convention, the international community was still subjected to aircraft hijacking incidents such as the TWA 847 aircraft hijacking in 1985 and a Kuwaiti aircraft hijacking in 1988.

With the lack of success in preventing aircraft hijacking by international Conventions, the international community has turned its efforts to specific aviation security activities since the early 1970s, when aircraft hijacking was first perceived as requiring a systematic approach to be taken in employment preventive measures for its suppression. In the United States, during the late 1960s and the early 1970s the number of U.S. aircraft hijacked to Cuba dramatically increased. Meanwhile, the development of Palestinian aviation terrorism in the Middle East and Europe was causing great concern among the major aviation states. In the United States, passenger searches and elementary electronic screening of luggage was introduced on all flights in the early 1970s. By the late 1960s, the Israeli carrier, El Al, adopted even more rigorous passenger search procedures to cope with mainly Palestinian aviation terrorism. Analysts developed profiles of the type of passengers who were most likely to

⁹⁹ William R. Fromme, "ICAO's Role in the Field of Aviation Security", Flight Safety Foundation, 1990, P. 91

¹⁰⁰ Robin E. Hill, "Airport Violence Violence and the Legal Principle Aut Dedere Aut Judicare", Terrorism and Political Violence, Vol. 1, No. 1, 1989, PP. 79-106; Robert P. Boyle, "International Action to Combat Aircraft Hijacking", Lawyer of Americas, Vol. 4, 1972, PP. 460-470;

hijack aircraft. Some states also deployed armed security guards, known as Sky Marshals. Although the impact of Sky Marshals has not been regarded as having been decisive, a number of states including Israel, Pakistan, Egypt and South Korea, still carry such staff.

The security measures against aircraft hijacking have now been in place for over two decades and indeed they have been considered to have been successful in reducing the number of international incidents. In fact, aircraft hijackings did decline from 184 aircraft hijackings between 1968 and 1970, to 134 incidents between 1971 and 1973, to 53 incidents between 1974 and 1976. However, these security measures have failed to provide a complete answer. Many loopholes still exist in the current system.

Since the adoption of screening procedures for passengers and their luggage, terrorist organizations have rapidly developed their tactics and abilities to overcome tight security systems. The international community, however, has failed to improve its anti-hijacking capacities. It is depressing to note that aviation authorities have been permitted to employ outdated and obsolescent security measures. This tendency may arise from the miscalculation that their airports are a low risk target for attack. After the TWA hijacking, for example, a Greek aviation spokesman said that the hijackers could not have smuggled their weapons past the two security checks at Athens airport.¹⁰¹ However, according to a report, as the hijacked TWA airliner was flying around the Mediterranean, one reporter walked unchallenged and uninspected through Athens's security checks.¹⁰² Even if those checks were rigourously operated, the poor perimeter fencing at Athens would have allowed terrorists to by-pass the system and

¹⁰¹ The Times, June 20, 1985

¹⁰² The Economist, June 22, 1985, P. 42

smuggle arms on board at the aircraft's ramp. Richard Clutterbuck precisely described the situation as follows:

"On one notorious Mediterranean airfield, airport staff regularly took a short cut to their work through a gap in the fence and their families used the same gap to collect wild flowers from the grass verges".¹⁰³

It was reported that Athens airport was a one of six around the world still causing extreme concern to the member airlines of the International Air Transport Association (IATA). Of the 40 airports which used to worry IATA, Athens was the only one which had failed to make any improvement despite the IATA's warning on airport security.¹⁰⁴ During the hostage crisis, the U.S. administration criticized the alleged laxity of security at Athens airport and the Greek decision on June 15 to release an accomplice of the hijackers detained at the airport, in return for the release of eight Greek passengers on the TWA airliner. The EC Foreign Ministers also criticized Greece on the same grounds, on June 18, during their meeting at Luxembourg. In addition, the U.S. State Department advised U.S. citizens to avoid Athens airport and asked U.S. airlines to suspend flights to Athens. The Greek administration lodged an official protest against the advisory notice which had led to the mass cancellation of holidays in Greece by American tourists, costing up to an estimated \$300,000,000 in lost revenue. The advisory notice was withdrawn on July 22, 1985, and U.S. officials later expressed appreciation of the improvement in security at Athens airport.¹⁰⁵

103 Richard Clutterbuck, Kidnap, Hijack and Extortion, London: Macmillan Press, 1987, P. 76

104 The Economist, June 22, 1985, P. 42

105 Keesing's Contemporary Archives, September 1986, P. 34637

Meanwhile, after the TWA 847 hijacking and under mounting international pressure, the Coordination Committee of Lebanon's government reviewed the security situation in general and security on the Beirut Airport Road in particular, and decided to take whatever measures were necessary to improve the security situation.¹⁰⁶ Following the Coordination Committee's decision, they strengthened security measures at Beirut airport and it was reported that measures at Beirut airport had greatly improved with the help of Syrian specialists following the TWA 847 hijacking crisis.¹⁰⁷

The hijacking of the TWA 847 promoted interest in airport security once again. The U.S Department of Transportation, through the Federal Aviation Administration (FAA), is mainly responsible for dealing with aviation terrorism and the supervision of aviation security programmes. The Office of Civil Aviation Security in the FAA is responsible for the supervising of the security and safety regulations concerning all aspects of civil aviation mandated by Title V of the International Security and Development Cooperation Act (ISDA) of 1985 which amended section 1115 of the Federal Aviation Act of 1958.¹⁰⁸

¹⁰⁶ Coordination Committee Statement on Security, NC201658 Beirut Domestic Service in Arabic, 1400GMT, July 20, 1985, SWB/Monitoring Report, July 22, 1985

¹⁰⁷ New Airport Security Measures Take Effect, NC19416 Beirut Domestic Service in Arabic, 1300 GMT, July 19, 1985, SWB/Monitoring Report, July 22, 1985; Syrian to Oversee Security, NC201754 Beirut Domestic Service in Arabic, 1500 GMT, July 20, 1985, SWB/Monitoring Report, July 22, 1985

¹⁰⁸ U.S. Congress, House Committee on Arms Control, International Security and Science and on International Operations of the Committee on Foreign Affairs and the Subcommittee on Aviation of the Committee on Public Works and Transportation, Joint Hearings: Impact of International Terrorism on Travel, February 19, 1986, P. 34; U.S Department of Transportation, FAA, Semiannual Report to Congress on the Effectiveness of the Civil Aviation Program: January 1, 1987-June 30, 1987, November 1987, P. 2

Before the passage of the ISDA of 1985, the FAA developed extensive security measures as mandated by the Air Transportation Security Acts of 1974.¹⁰⁹ The FAA's security programme has been generally successful in preventing aircraft hijackings and other significant attacks against civil aviation in flights originating in the U.S.. It was reported that, in the U.S., a total of 38,000 weapons were detected and more than 100 hijackings or related crimes were prevented from 1973 to 1986.¹¹⁰ In the aftermath of the TWA 847 incident, U.S. attempts at increasing aviation security were basically concerned with the security programmes in other states. In response to the TWA 847 hijacking, the U.S. Department of Transportation asked the ICAO to review security measures as they are currently implemented by its members with a view to improving security at international airports, to review and strengthen existing international airport security standards, to provide a means of evaluating the level of adherence to ICAO security standards at international airports, and to expand its security training program.¹¹¹ Upon receiving this request from U.S. Department of Transportation, in December 1985, the ICAO revised and strengthened the security standards outlined in Annexe 17 of the Chicago Convention. According to the new Annexe 17, member nations of the ICAO were now required to

109 U.S. Congress, Senate Committee on Governmental Affairs, *An Act to Combat International Terrorism: Hearings On S. 2236*, January 25, 1978, P. 54

110 U.S. Department of Transportation, FAA, Semiannual Report to Congress on the Effectiveness of the Civil Aviation Program: July 1-December 31, 1986, May 1987, P. 6 and Exhibit 6

111 U.S. Congress, House Committee on Arms Control, International Security and Science and on International Operations of the Committee on Foreign Affairs and the Subcommittee on Aviation of the Committee on Public Works and Transportation, *Joint Hearings: Impact of International Terrorism on Travel*, February 19, 1986, P. 37

expand preflight security checks for certain luggage in certain circumstances to discover illegal weapons and other dangerous devices, to ensure that baggage that does not belong to passengers is either not loaded or is thoroughly inspected, and to intensify other security measures at international airports and airline facilities.¹¹² However, lacking the means to enforce its decisions, ICAO can only exercise moral influence, and risks losing much of its effectiveness. Like any other international regulatory agency, ICAO has to resort to a variety of techniques to secure the cooperation of its member states. These states are pledged to cooperate in a general way with ICAO and may find it to their advantage to do so, but they cannot normally be compelled to comply with the rules. To achieve its objectives, the ICAO has made continual efforts to improve its organizational approach to the security of civil aviation, its technical assistance to member states and the formulation of standard procedures for states to use to evaluate their own security programmes.¹¹³ In this situation, it is impossible to anticipate the implementation of measures which would ensure total security. To achieve global solutions, a strict application of security measures and a plurality of controls, national and international, including diplomatic pressure and economic boycotts are required.

¹¹² Ibid, PP. 37-38

¹¹³ Ibid, P. 39

IV-3. KAL 858 Sabotage Bombing

In the late 1960s and early 1970s, the hijacking threat to civil aviation worldwide increased to such proportions that Western states, led by the United States, developed and implemented a security system to prevent or deter aircraft hijacking. However, one of the problems that exists today is that terrorists have become sophisticated. This has come about, in part, as a result of the increased training and support provided by several states such as Libya, Iran, Syria and North Korea. Better technology is also now available to aid the terrorists that had not been available to them in past decades. New explosives and detonating devices seem to be developed faster than the Western capability to counter them. Consequently, the nature of the threat to civil aviation changed from one of hijacking to a sophisticated sabotage bombing threat. Since the early 1980s, the sabotage bombing of aircraft has become one of the most common tactics and form of attack against civil aviation. The popularity of this method is probably explained by the fact it is the simplest and least risky method of attack that can be used by a terrorist. Over the past decade more than 1,000 people are known to have died in sabotage bombings, which in the early 1980s superseded aircraft hijackings as the favoured form of aviation terrorism. Unfortunately, unlike the early 1970s action to protect against hijackings, the world has not established the development and implementation of a comprehensive civil aviation security system to protect against sabotage bombings. In these circumstances, one of the most devastating acts against civil aviation occurred on November 29, 1987, when a Korean Airlines 858 was destroyed in mid-air. This incident bore similarities to other sabotage bomb attacks on civil aviation. At the same time, the destruction of KAL 858 raised the issue of aviation security against sabotage bombing. The Pan Am 103 disaster brought a great amount of

world attention as the majority of victims were American, the journey began at Frankfurt, passengers and luggage changed planes at London, the explosive material used had been manufactured in Czechoslovakia, and warnings had been given to American Embassies in Europe. Unlike the Pan Am 103 incident, the destruction of KAL 858 failed to receive much international attention as the victims of the disaster were mainly Korean, and the crash point was far away from Western states. However, the destruction of KAL 858 might signal the prospect of further sabotage attacks by a means slightly different from those used against Pan Am 103. After the survey of the facts of the incident, revealing North Korean sponsorship, and the history of terrorist attacks against South Korea, it is possible to understand the background of this incident which, in part, derived from the special political situation in the Korean Peninsula. In addition, analytical discussion of the incident is necessary to examine the critical problems which relate to the security of civil aviation. Finally, a review will be made of the methods employed to deter and prevent such forms of aviation terrorism in the future.

IV-3-1. Facts of the Incident

On November 29, 1987, Korean Air Lines (KAL) flight 858, flying from Abu Dhabi to Bangkok, disappeared with 95 passengers and 20 crew members soon after it had ceased communication with the ground control station in Rangoon, Burma.¹¹⁴ When the government of the Republic of Korea (ROK) and KAL learned of the missing aircraft, they analyzed the overall situation and concluded that there was a great possibility that the plane had been destroyed by terrorists'

¹¹⁴ Facts on File, December 4, 1987, P. 903

sabotage bombing, because there had been no indication at that time that anything was wrong with the flight, and no distress calls had been received from the aircraft before it disappeared.¹¹⁵ The Korean government and KAL immediately began to search for the airliner near the likely crash point with the full cooperation of the states concerned, such as Burma, Thailand, and India. They made great efforts to find the wreckage of the airliner including the "black box" flight recorders. It was not until December 13, more than two weeks after the incident, that the first piece of its wreckage was found in the Andaman sea off the coast of Burma. Subsequently, several pieces of wreckage were found in the Andaman sea by the Burmese Navy in January 1988. The finding of the wreckage confirmed that KAL 858 had in fact exploded in mid-air over the Andaman sea.¹¹⁶

The Korean investigation authorities began to examine the identities of the passengers on board the airliner, particularly 15 of those who had disembarked from the plane in Abu Dhabi, the Flight's first stop-over point.¹¹⁷ In the process, suspicion was focused on two Japanese passengers named Shinichi Hachiya and Mayumi Hachiya. They were suspected for the following reasons.¹¹⁸ First,

115 "KAL Bomber Kim Hyun-Hui: From Arrest to confession(Korean)", Wall Kan Cho Sun, February 1988, P. 250

116 ROK Ministry of Foreign Affairs, Findings of the Investigation by the Government of the Republic of Korea on the Destruction of Korean Air Flight 858, March 4, 1988 (hereafter Findings of Investigation); "On Explosion of Korean Air Flight 858", Statement by Mr. Kwang-Soo Choi, Minister of Foreign Affairs, at the UN Security Council, February 16, 1988 (hereafter Statement), The Korean Journal of International Law, Vol. 33, No. 1, 1988, PP. 151-158; Facts on File, December 18, 1987, PP. 926-927

117 Arab News, December 14, 1987

118 Findings of Investigations op.cit, P. 2; Statement, op.cit, 153; KAL Bomber Kim Hyun-Hui. op.cit, P. 250

on the entry report forms, they had written their given names, Shinichi and Mayumi contrary to the usual custom of Japanese tourists of only writing family names. Second, they had travelled to such places as Vienna and Belgrade which are frequently used by North Koreans as bases for overseas terrorist operations. Third, they used KAL 858 from Baghdad to Abu Dhabi, even putting up with three- to six-hours wait at airports as transit passengers despite the fact that Bahrain, their destination, could be more conveniently reached by a direct route from Belgrade via Amman.

Based on these suspicious facts, the ROK Embassy in Bahrain promptly checked on their passports with the Japanese Embassy, and discovered that at least one of the passports had been falsified. Tokyo police tracked down the real Shinichi Hachiya, who said he had loaned his passport and personal seal four years previously to Akira Miyamoto, an entrepreneur. Then in South Korea a friend of Miyamoto came forward. It turned out that Miyamoto was really Lee Kyong-Woo, a South Korean who reportedly had helped orchestrate a 1948 communist uprising in Cheju Island in South Korea and then fled to Japan to avoid arrest. Miyamoto became a resident spymaster specialising in false identities for North Korean operatives.¹¹⁹ The Bahraini authorities were notified of this, and apprehended the two suspects at the airport when they were going through exit procedures. While being held at the airport for questioning, they attempted to commit suicide by taking cyanide capsules which they had hidden in a packet of cigarettes, thus increasing suspicions about their involvement with the sabotage bombing of the aircraft. Shinichi Hachiya died within hours, but the young woman, Mayumi Hachiya, survived and was hospitalized in a serious

¹¹⁹ Newsweek, December 14, 1987, P. 32

condition.¹²⁰ Immediately following the suicide attempt, the ROK government began to suspect that the incident had been an act of terrorism committed by North Korea, because their method of suicide by taking poison was identical to that usually used by North Korean agents. The type of poison they had taken was the same as that carried by North Korean agents who had been captured in the past.¹²¹ The South Koreans requested the Bahrain government to hand over the suspects to the ROK.¹²² The government of Bahrain examined the ROK's request and decided to extradite Hachiya Mayumi, and return the body of her deceased partner and all the evidence to the ROK.¹²³ Hachiya Mayumi arrived in Korea on December 15, but she did not respond to any questions posed in Korean. She pretended to be Chinese, for example, by writing Chinese poems.¹²⁴ On December 23, eight days after her arrival, she voluntarily began to make a detailed confession in Korean.¹²⁵

120 Keesing's Record of World Events, May 1988, P. 35905

121 Ibid; Facts on File, December 4, 1987, P. 903;

122 Both the State of Bahrain and the ROK are contracting parties to the Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation(Montreal Convention of 1971)

123 Findings of Investigation, op.cit, P. 3; KAL Bomber Kim Hyun-Hui, op.cit, PP. 251-252; Facts on File, December 18, 1987, P. 926

124 KAL Bomber Kim Hyun-Hui, Ibid, PP. 255-256

125 She became increasingly agitated because, as she said later in a news conference, what she saw of life in South Korea on Television and on the streets of Seoul was entirely different from what she had been led to believe. She began to realise that she had been exploited as a tool for North Korean terrorist activities. She said also that "I deserve to die a hundred times over, but before die I decided to reveal the whole truth of the incident to help make up for the horrible crime I committed." See, The Korea Herald, January 19, 1988; Facts on File, January 22, 1988, P. 30

The sabotage bombing of the KAL 858 was conducted under direct orders from Kim Jong-Il, the son of and heir presumptive to the North Korean leader, Kim Il-Sung, in order to disrupt the ROK presidential elections scheduled for December 1987, the 1988 Seoul Olympic Games, and to foster social discord within South Korea. It was executed by two special agents of the Intelligence Department of the Central Committee of the North Korean Worker's Party, Kim Sung-Il and Kim Hyun-Hui, disguised as Japanese nationals and using the names of Shinichi Hachiya and Mayumi Hachiya.¹²⁶

IV-3-2. Identity of the Terrorists

Kim Sung-Il, who disguised himself as a Japanese named Shinichi Hachiya, was a special agent of the Intelligence Department of the Central Committee of the North Korean Workers Party. He was an elite agent, who had long experience overseas, was fluent in four languages, Japanese, Chinese, English and Russian. He once sneaked into Kimpo International Airport on September 21, 1984 and stayed at Seoul for six days.¹²⁷

Kim Hyun-Hui, who masqueraded as a Japanese woman by the name of Hachiya Mayumi is the eldest daughter of Kim Won-Suk, who used to work for the North Korean Foreign Ministry. She was recruited in February, 1980 as an

¹²⁶ Findings of the Investigation, op.cit, p. 2-5; Statement op.cit, PP. 151-158; Cho Sun Il Bo(Korean), January 17, 1988; The Korea Herald, January 19, 1988; KBS Chronology(Korean), 1988, P. 62; Facts on File, January 22, 1988, PP. 29-30; Keesings Record of World Events, Vol. XXXIV, No. 5, 1988, P. 35905; See also, "North Korean Special Agent Mayumi", Wall Kan Cho Sun, February 1988, PP. 235-249

¹²⁷ Findings of Investigation, Ibid

operative on account of her family background, good looks and ability to speak Japanese. She was in the second year at the Pyongyang Foreign Language College at the time.¹²⁸ In 1980, she underwent a year's incommunicado training in political ideologies, martial arts, shooting and other military courses at Kumsung Political-Military College. In July 1984, Kim Hyun-Hui was paired with Kim Sung-Il as a father-daughter sabotage team and underwent thorough training for three years and four months in covert operations, including bombing, foreign languages and adaptation to western cultures.¹²⁹ She was educated that to die for Kim Il-Sung while carrying out a mission would be the right thing to do and would bring her the greatest happiness and glory.¹³⁰ She said that:

"I left Pyongyang to blow up KAL 858. I placed the bomb on the plane in Abu Dhabi and I got off. I had only one thought in my mind, had I successfully carried out the order to blow up the plane. ... In North Korea we worship Kim Il-Sung as a god. We are even willing to sacrifice our lives to obey him. To die for him would be the right thing to do and would bring us our greatest happiness and glory. We are taught this and we believe it. Since all North Koreans are taught and educated this way, any other young person in North Korea would do the same as I have done."¹³¹

¹²⁸ Kim Hyun-Hui was a actress when she was a elementary school girl owing to her beautiful face and good family background. On November 2, 1972, while she was in the first year of middle school, she presented a flower bouquet to Chang Key-Young, senior ROK delegate to the South-North Coordinating Committee, when he visited Pyongyang to attend the second meeting of that Committee. See, Explosion of Korean Air Flight 858, Korean Overseas Information Service, January 1988

¹²⁹ Ibid

¹³⁰ Korea: Assignment, BBC 2, December 4, 1990

¹³¹ Ibid

Kim Hyun-Hui was sentenced to death on March 27, 1990 for planting a bomb on the KAL 858,¹³² but she was pardoned by the amnesty, approved by ROK President Roh Tai-Woo, following a decision by the cabinet to pardon her.¹³³ The ROK officials explained the reasons of her pardon as follows: "Kim Hyun-Hui was merely a tool to commit the crime of bombing an airliner and Kim Il-Sung, and his son, Kim Jeong-Il were the real criminals". "She has repented and is the only witness of the incident, and can crush North Korean's black propaganda that our probe of the incident and trial have been fabricated".¹³⁴

IV-3-3. North Korean Terrorism Campaign against ROK

After Japan's surrender in August 1945, ending the Second World War, Korea was divided at the 38th parallel into military occupation zones: Soviet forces dominated the northern zone and U.S. the southern. Since the division of the peninsula in 1948, the rival governments in Seoul and Pyongyang have been involved in a high stakes competition to eclipse one another and emerge as the legitimate government of the entire peninsula. Throughout these years of struggle, North Korea has consistently shown its willingness to use violence and military force. On June 25, 1950, North Korea troops invaded the South, precipitating the Korean War. An armistice was signed in July 1953, and the

¹³² The Hankook Ilbo(Korean), March 28, 1990

¹³³ The Hankook Ilbo, April 4, 1990

¹³⁴ Ibid; The Guardian, April 13, 1990

cease-fire line, again roughly following the 38th parallel, remains the frontier between North and South.¹³⁵

More recently, North Korea has sought to strengthen its diplomatic hand through aggressive support for international terrorist organizations. Using special training camps in North Korea as well as its own military personnel stationed abroad. It has trained more than 5,000 terrorist recruits from 25 states. North Korean military advisers have also operated in some 30 nations. North Korea's terrorist allies have included the Red Brigade, the Baader-Meinhof Gang, the Japanese Red Army and the Palestinian terrorist movements.¹³⁶

Sponsorship of terrorist attacks against the ROK has been part of North Korea's campaign to destabilize the South. The sabotage bombing of KAL 858 was not the first time that the North Koreans had used terrorist attacks against the ROK. For instance, on August 15, 1974, a North Korean agent attempted to assassinate ROK President, Chung-Hui Park, while he was delivering an Independence Day address at the National Theatre. The president escaped unharmed, although, his wife and a choir girl were killed. The assassin, Mun Sae-Kwang, was arrested after being wounded by security guards. The ROK government charged that the attempted assassination of President Park had been plotted by the North Korean government.¹³⁷

¹³⁵ See generally, Korea's Quest for Peaceful Unification: Its History and Prospects for the Future, Research Centre for Peace and Unification(Seoul, Korea), 1978

¹³⁶ Daryl M. Plunk, North Korea: Exporting Terrorism, Backgrounder, No.74, The Heritage Foundation: Asian Studies Centre, February 25, 1988, P. 2; See also, U.S. Department of State, Patterns of Global Terrorism: 1985, October, 1986, P. 8; The Washington Times, January 13, 1988; Joseph S. Bermudez, Jr., Terrorism: The North Korean Connection, London: Crane Russak, 1990, PP. 61-165

¹³⁷ Edward F. Mickolus, *op.cit*, PP. 470-471

Clearly the most aggressive act committed by North Korea was the Rangoon bombing. The bomb attack at the Martyrs' Mausoleum in Rangoon, Burma, on October 9, 1983, took place while Korean officials accompanying President Chun Doo-Hwan of the ROK on his goodwill state visit to Burma and Burmese officials were waiting at the Martyr's Mausoleum for the arrival of President Chun for a wreath-laying ceremony. In that attack, 17 ROK officials, including four cabinet ministers, and four Burmese officials lost their lives. This incident led to the Burmese withdrawal of the recognition of North Korea and the shutting down of the North Korean Embassy in Burma. Of the three North Korean army officers who carried out the bombing, two were captured alive. After trials by the Burmese courts, one was executed and the other, who confessed, is still serving his life sentence in Burma.¹³⁸

The fact that the ROK had won the honour of hosting the 1988 Seoul Olympic was a tremendous blow to the prestige of the North Korea. The majority of all the North Korea's operations immediately prior to the Olympic were conducted with one goal in mind, disrupting the 1988 Seoul Olympics by making the world believe that the ROK was unsafe to visit. On September 14, 1986, a powerful explosion in front of the international terminal building at Seoul International Airport killed five people and injured 29 others.¹³⁹ The ROK government charged that the explosion was a North Korean engineered attempt both to disrupt the 10th Asian Games, opening in Seoul on September 20, 1986,

138 A Lingerin Nightmare: The Rangoon Bombing, Korean Overseas Information Service, October, 1984; The Dong-A Ilbo(Seoul, Korea), September 4, 1984; The Korea Herald(Seoul, Korea), November 27, 1983

139 U.S. Department of Transportation, FAA, Criminal Acts against Civil Aviation: 1986, F.A.A., P.41

and to cast a shadow over the Seoul Olympics.¹⁴⁰ The sabotage bombing of the KAL 858, as mentioned above, was also carried out by North Korea as part of an attempt to disrupt the 1988 Seoul Olympic Games.

North Korea has not shown any sign of change in its persistent use of international terrorism as an instrument of national policy. Not only do they deny their involvement in the bombing in Burma and in the sabotage bombing against KAL 858, but also argue that it was the ROK that committed these crimes. Such preposterous lies by North Korea do not in themselves disturb the ROK, because the facts speak for themselves and no one believes their allegations. Such perversion of the truth is dangerous because it shows complete absence of regret or moral scruples. Those charges have the dangerous implication that North Korean regime may repeat its terrorist acts in the future.

IV-3-4. World Reaction

After Kim Hyun-Hui confessed on national television, on January 15, 1988, the government of South Korea announced its intention to retaliate against North Korea for its alleged complicity in the destruction of the KAL 858. The minister of culture and information, Lee Woong Hee, warned that "North Korea will not be able to get away with its barbarous terrorism without receiving appropriate punishment for it, including retaliation commensurate with its gravity." The South Korean Government placed its armed forces on a full alert. In fact, South Korea was not planning to retaliate militarily, but certainly preferred political or economic sanctions against North Korea.¹⁴¹ The South Korean Government also

¹⁴⁰ Joseph S. Bermudez, Jr., *op.cit.*, P. 48

¹⁴¹ Facts on File January 22, 1988, P. 30; Arab News, January 16, 1988

cancelled its initiative allowing its officials to talk with North Korean officials and called upon other governments to condemn the sabotage bombing of the KAL 858.¹⁴² In addition, for the safety of civil aviation in the future, the ROK government cohosted with the United States an Asia-Pacific Regional Aviation Security Conference in June 1988 that included representatives from eight nations, IFALPA and ICAO. The conference promoted cooperation between the airlines and airport authorities and planned for aviation security during the Seoul Olympics.¹⁴³

After the KAL 858 incident, the U.S. Secretary of State designated North Korea a state sponsor of terrorism and added North Korea to a list of states that supported international terrorism. The U.S. Government also tightened its strict visa regime on North Korean passport holders and withdrew its authorization issued in March 1987 allowing U.S. diplomats to hold substantive communication with North Korean diplomats in neutral settings.¹⁴⁴ In addition to the U.S. reaction, a number of states, including the United Kingdom, Japan, Denmark, Singapore and the Netherlands, issued strong statements condemning both the sabotage bombing and North Korea's responsibility for it. The government of Japan, on January 26, 1988, imposed diplomatic sanctions on North Korea for its alleged role in the destruction of the KAL 858. Under Japan's sanctions, contact between Japan and North Korea was severely

¹⁴² The Bombing of Korean Airlines Flight: KAL 858, Hearing and Makeup before the Subcommittee on Asian and Pacific Affairs of the Committee on Foreign Affairs House of Representatives, 100th Congress Second Session on H. Con. Res. 246 (hereafter Hearings), February 4, 1988, Washington: U.S. GPO, 1989, P. 10

¹⁴³ U.S. Department of State, Patterns of Global Terrorism:1988, P. 40

¹⁴⁴ Hearings, op.cit, P. 13; Facts on File, January 22, 1988, P. 30

restricted, and Japanese officials, in principle, were not allowed to visit North Korea and North Korean officials were denied entry to Japan. Also, flights between Japan and North Korea were banned.¹⁴⁵ In December 1988, Soviet President Gorbachev's speech to the United Nations, despite the Soviet Union's earlier policy of close relations with North Korea, condemned the use of violence and terrorism as a means of attaining political or ideological goals with a clear reference to North Korea.¹⁴⁶

The destruction of KAL 858 is not simply a tragic loss of innocent life. It reminds us that liberal democratic states are engaged in a bitter global struggle against terrorism. It also reminds us that those who currently control North Korea repeatedly ignore civilized rules of behaviour. The entire world community must let the North Korean Government know that no one will tolerate acts of state terrorism and the North Korean leaders must understand that they have no alternative but to abandon their confrontational and murderous approach to international affairs. If the world should prove indifferent, North Korea may conclude that terrorism carries no penalty and continue to conduct its atrocities against South Koreans. Such actions could make the Korean peninsula and world peace dangerously unstable.

¹⁴⁵ Japan did not impose any restrictions on its US\$ 350 million annual trade with North Korea. Diplomatic sanctions was lifted on September 13, 1988, Facts On File, February 5, and September 23, 1988, P. 74 and 691; Hearings, op.cit, P. 18

¹⁴⁶ Backgrounder Brief, Foreign and Commonwealth office, June 1989, P. 4

IV-3-5. Analytical Discussion of Event

Behind the sabotage bombing of the KAL 858, killing all the passengers and crew members aboard, there is a state, North Korea. This is notable in terms of resources, the selection of operatives and their training and preparation, and the almost unlimited ways and means available for conduct of the terroristic operations. The destruction of the KAL 858 was not launched overnight. The Planning and the intensive training for this type of operation was conducted over a period of eight years in North Korea. The mission was carefully conceived, planned and executed. The two terrorists received the explosives from a North Korean official in Belgrade. In this respect, the KAL 858 incident is very similar to the attempted bombing of the El Al aircraft at Heathrow Airport on March 17, 1986. A Palestinian terrorist working with the Syrians, Nazir Hindawi, tried to destroy an El Al aircraft with 373 people on board by means of an explosive device hidden in the luggage of his pregnant girl friend, Anne Marie Murphy, without her knowledge.¹⁴⁷ The British authorities had much evidence, proclaimed in court, that the Syrians had not only known about this projected exploit in advance but also had actively assisted in the operation.¹⁴⁸ This state-supported operation makes the work of the aviation security system much more difficult.

¹⁴⁷ U.S. Department of Transportation, *Criminal Acts Against Civil Aviation 1986*, FAA, P. 32

¹⁴⁸ Edgar O'Ballance, *Terrorism in the 1980s*, London: Arms and Armour Press, 1989, P. 36; Geoffrey M. Levitt, *Democracies against Terror: The Western Response to State-Supported Terrorism*, New York: Praeger Publishers, 1988, PP. 85-92; *The Guardian*, October 8, 11, 23, 25, 1986; *Los Angeles Times*, November 11, 1986; *Atlanta Constitution*, November 11, 1986; *Chicago Tribune*, October 26, 1986; *Atlanta Journal-Constitution*, October 26, 1986

The two terrorists, Kim Sung-II and Kim Hyun-Hui, were unusual passengers. They used Flight 858 from Baghdad to Abu Dhabi, even putting up with six-hour waits at the airport as transit passengers despite the fact that Bahrain, their destination, could be more conveniently reached by a direct route from Belgrade via Amman. They also disembarked at a stop-over. For these suspicious reasons, they should have been classified as highly suspect passengers. The checking of highly suspect passengers must be thorough and methodical. When the two terrorists used an Iraqi aircraft from Belgrade to Baghdad, the crew seized the batteries of battery-powered goods at the time of boarding and returned them to the passengers only after the aircraft landed in Baghdad. During the security screening process in Baghdad, the airport security officer raised the issue of the batteries in the radio. At this point, Kim Sung-II complained by saying that this was the only place where the personal items of passengers were checked, and turned the radio on to demonstrate to the Iraqi security officials that it was a *bona fide* radio. Hereupon, security officers acted as if they were sorry and permitted them to carry the radio.¹⁴⁹ This was a crucial mistake. The procedure of checking highly suspect passengers demands that any object which can not be properly searched will not be permitted onto the aircraft in any circumstances. In the case of KAL 858, a radio, like other electronic appliances, should not have been allowed on board the aircraft. Many sabotage attacks in recent years indicate that electronic items have been frequently used to conceal sophisticated plastic bomb. In addition to the KAL 858 incidence, the bomb that blew up Pan Am 103 over Lockerbie was concealed in a radio cassette player in the forward luggage hold. Since the Lockerbie disaster, airlines in the United States have started using tougher security inspections on

¹⁴⁹ Investigation Findings, op.cit, P. 49

electronic items under orders from the FAA. During the ICAO conference in Montreal in February 1989, the British and U.S. transport secretaries jointly produced a proposal for security, which they urged all international airports to adopt. It advocated a ban on the carrying of electronic items including radios and cassette tape players.¹⁵⁰ Many security experts also called for amending an agreement to restrict the carrying of electronic items.¹⁵¹ The total ban of electronic items is not easy to implement because travellers today want to take modern electronic items for their convenience and businessmen have become accustomed to carry personal lap-top computers wherever they go. In this respect, electronic devices including personal lap-top computers, tape recorders, radios, video equipment and cameras should be very carefully searched by security staff.

It is also extremely important for security staff performing a body search to note that a corset can be specially constructed to conceal the parts of an explosive device. The components of an explosive device may be carried by one or more persons. The parts are assembled and the explosive device set nearer the time of the planned sabotage bombing. This is done to avoid detection by security systems and to reduce the danger to the terrorist lives at an early stage of their mission.

The appearance of the sophisticated bomb in the armoury of the civil aviation terrorist is an alarming new development. This level of sophistication and concealment had never been used against civil aviation before. Compared to known devices, the improved explosive devices are devastating. They could be

¹⁵⁰ Edgar O'Ballance, "Aviation and Airport Security", Military Digest, April-May, 1989, P. 12

¹⁵¹ The International Herald Tribune, February, 21, 1989

easily carried by a terrorist in any number of ways to evade detection. The small size batteries to power the bomb could be disguised in any number of legitimate electronic devices carried by passengers. An example of this ease of concealability occurred on April 2, 1986, when a Lebanese female is suspected to have planted the bomb on TWA 840. The Lebanese female suspected of planting the bomb under the seat cushion was observed to be listening to a cassette tape player during her flight. She is thought to have connected the batteries to the explosive device when she went to the lavatory just prior to landing in Athens, a stop-over on the flight. After returning from the lavatory, she could easily have left the now-armed and powered device under the seat cushion of her seat without being noticed.¹⁵²

It is not enough to count the sabotage incidents and expect the uninitiated to understand the level of the threat against civil aviation. It is necessary that the types of sabotage devices, their ease of concealment, difficulty of detection, and their destructive potential be examined. The time bomb made of Composition C-4 that destroyed the KAL 858 represents a variation in concealment. Approximately one pound of liquid explosive was concealed in a liquor bottle. A Japanese-made Panasonic radio, Model RF-082, was used to conceal approximately 350 grams of plastic explosives, a timer, electric blasting cap, and power source. The inside of the radio had been rearranged to minimize the function of the radio to make enough room for the explosives and the detonating mechanism. One battery of the radio had been wired to serve as the power source to detonate the electric blasting cap and, in turn, the explosives in the

¹⁵² Statement by Mr. Billie H. Vincent before a Subcommittee of the Government Operations House of Representatives, September 25/26, 1989, P. 12; US Department of Transportation, Criminal Acts against Civil Aviation: 1986, P. 14

radio and liquor bottle. Composition C-4 in the radio time bomb is 1.34 times more powerful than TNT. It can be easily moulded into any shape. At the same time, it has no smell and can not be detected by conventional methods such as X-ray and sniffer dogs.¹⁵³ As noted above, the early stage of aviation security was concerned with and was designed to prevent aircraft hijackings. The traditional technology such as original X-ray screening units and metal detectors worked well in detecting handguns and knives. Aviation terrorists, then, became more sophisticated and started using plastic explosives such as Semtex. This problem has become quite critical since early 1980s. Plastic explosives pose serious problems for detection. They have no metal content, which traditional detection devices can reliably discern. Semtex can be shaped to fit into items like radios, or formed into thin sheets in luggage, making detection even more difficult. These explosives defy reliable detection by X-ray and other devices now operational at the airports.¹⁵⁴ In order to develop automated screening devices to detect the presence of explosives, research and development in the security field has been accelerated in recent years. These devices included Colour Coding Detectors(CCD), Vapour Detection Systems(VDS) and Thermal Neutron Analysis(TNA). CCD are sniffer machines which detect arms and explosives by the odour they emit, showing the results on the monitoring screen in colour. Organic material, for example, shows up as bright orange, metal as dark blue, and plastic explosive as orange-brown. The systems are particularly good at identifying plastic explosives. However, it is known that so far these

¹⁵³ Investigation Findings: Explosion of Korean Air Flight 858, Korean Overseas Information Service, January 1988, P. 21; Cho Sun Il Bo(Korean), January 9, 1988; Newsweek, December 14, 1987

¹⁵⁴ The Sunday Post, May 27, 1990; The Daily Telegraph, March 23, 1990

systems can not detect Semtex.¹⁵⁵ Although Semtex does not give off any odour, it does emit vapour, and VDS have been developed capable of sniffing vapour.¹⁵⁶ By far the most mature technology for explosives detection in luggage is TNA. The U.S. began research and development (R&D) on explosives detectors soon after the bombing at LaGuardia Airport on December 29, 1975, when a fairly large bomb exploded in an airport locker killing 11 people. The U.S. government reacted to an event as opposed to being proactive, and initiated an explosives detection R & D program. In the late 1970s, R & D was undertaken by the FAA on TNA explosives detection technology. In 1985, the FAA greatly accelerated its efforts when the destruction of an Air India flight off the coast of Ireland made it apparent that the threat was escalating rapidly.¹⁵⁷ Under the TNA process, the object being analysed is bombarded with neutrons which stimulate gamma ray-emitting elements and interact with any traces of gamma rays given off. The atomic content of all materials constituting the bag and contents emitting the rays are then compared with the known atomic content of explosive materials.¹⁵⁸ Despite widespread acknowledgement that TNA is the best system for the detection of explosives, many experts doubt the effectiveness of TNA. They are concerned that over reliance should not be placed on TNA detectors since their detect capability diminishes if only small amounts of explosive are present. It was reported that TNA can not detect

155 Edgar O,Ballance, op.cit, P. 18

156 Ibid, P. 19

157 Mitchell Waldrop, "FAA Fights Backs on Plastic Explosives", Science, Vol. 243, January 13, 1989 (reprinted)

158 David Learmont, "Neutrons Detect Plastic Explosives", Flight International, May 6, 1989

bombs as small as the device which brought down the Pan Am 103.¹⁵⁹ At the same time, the high cost of TNA is one of the obstacles standing in the way of the adoption of new security technologies. It is unlikely that this high-technology response will bring about the ultimate cessation of terrorist sabotage bomb attacks. TNA is not a cure and can never be any more than a supplement to the civil aviation security system.

According to the report of the U.S. Congress Office of Technology Assessment(OTA), there is no evidence that any device is capable by itself of reliably detecting small quantities of plastic explosives in checked luggage.¹⁶⁰ Since each explosive detection system has its own particular weakness, one of the solutions for a security system would be a combination of different technologies. This would exploit the advantages of each technique while compensating for its weaknesses. At the same time, to keep pace with the changing terrorist threat to civil aviation, research and development programmes should be intensified. In addition, the significance of the human element in civil aviation security should not be underestimated. Civil aviation security systems have historically placed an over-reliance on technology. It is no use having high-tech equipment if we use low-tech people. Without a fully trained and functioning human element, no security system will be effective.

Recently, a number of sabotage bombings against civil aviation were characterised by "non-reconciliation of luggage". Someone checks in for a flight and checks in their luggage. The luggage is loaded but the passenger does not board the flight, which leaves without him but with his luggage. The Air India

¹⁵⁹ The Independent, January 27, 1990; Airport International, January 1990, P. 18

¹⁶⁰ U.S. Congress, Office of Technology Assessment, Technology Against Terrorism: The Federal Effort, OTA-ISC-481, Washington, DC: U.S. GPO, July 1991, P. 61

disaster in June 1985 gave us an important lesson in this respect. Evidence showed in the case of the Air India incident that a passenger checked his luggage in at Vancouver for an interline journey across Canada and on to New Delhi. The passenger was in possession of a confirmed booking Vancouver-Toronto but waitlisted Toronto-New Delhi. Normal procedure would have seen the bag checked only to Toronto. However, it was through-checked to its final destination. The terrorist failed to board the aircraft. The luggage which is thought to have contained a powerful bomb travelled alone without its owner.¹⁶¹ This situation was repeated in the respect of the destruction of a UTA DC-8 at N'Djamena in 1984 and the explosion at Narita Airport in Tokyo in 1985.¹⁶² Following the Air India disaster, the civil aviation community started to recognize the importance of luggage reconciliation to prevent similar attacks, and ICAO adopted a new standard for luggage security, Standard 5.1.4. of Annexe 17, which requires an effective reconciliation of passengers and their checked luggage.¹⁶³ In fact, prior to 1985, the significant threat to civil aviation was seen as aircraft hijacking. As a result, the Standards and Recommended Practices tended to focus on aircraft hijacking rather than sabotage attack. Further changes to Annexe 17 were developed in 1988 which included specifications to further assist in fighting sabotage. Some of the changes included in Amendment 7 to Annexe 17, which was adopted in June 1989, provide for a clarification of the

161 Salim Jiwa, The Death of Air India Flight 182, London: W. H. Allen, 1986, PP. 78-86

162 U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation: 1984, P. 4 and 1985, P. 11

163 Rodney Wallis, *op.cit*, P. 3

standard dealing with the reconciliation of luggage with passengers and control over items left behind on the aircraft by disembarking passengers.¹⁶⁴

It is generally accepted that passengers and their luggage should not be kept apart from their allocated aircraft at any stage of a journey, because such a situation could give a opportunity to terrorists who could plant explosive devices in their luggage and then leave the flight at stopover before the explosion. Most airlines positively check for "No Show" passenger. However, luggage is not being checked on all flights to make sure it belongs to a passenger and has not been slipped into the luggage sorting system. According to the UK Department of Transportation, passengers are still flying on aircraft containing unaccompanied luggage.¹⁶⁵ Total luggage reconciliation is not a easy task. In a sense, it is impossible to stop the problem of non-reconciliation luggage at major international airports where there is so much luggage going through. However, the most serious concern is the misoriented approach of the airlines. This was confirmed by Issac Yeffet, the former director of security for El Al, who stated:

"If Lockerbie tells us anything, it is that airlines must match luggage to passengers. If, for any reason, a piece gets on an airplane without its owner, it should be taken off immediately, no matter what the delay or inconvenience to passengers. But airport managers, more worried about on-time statistics, routinely let planes fly with unaccompanied bags".¹⁶⁶

Civil aviation authorities have to note that this approach might give a chance to terrorists who set their eyes on finding any kind of security loophole for putting deadly devices on to an aircraft. In order to minimise risks of such

¹⁶⁴ ICAO, International Standards and Recommended Practices, Annex 17 to the Convention on International Civil Aviation, Fourth Edition, October 1989.

¹⁶⁵ The Sunday Telegraph, November 10, 1991

¹⁶⁶ "No Airport in the U.S. is Safe", Life, March 1989, P. 132

attacks, it is important to remove the possibility of luggage travelling without its owner by adopting and enforcing ticketing and check-in procedures.

Despite the luggage matching system, luggage that could have contained explosives has managed to slip through. Sometimes the bomb carrier will check in for a multi-stage flight and will ask for his luggage to be checked through to his final destination but will leave the aircraft at one stage. The carrier simply does not re-board the ongoing flight at that stage. The most important lesson from the KAL 858 incident is that the remaining passengers with all their belongings must be checked during the stop-over. In the KAL 858 case, two terrorists got off the plane at Abu Dahbi Airport, a stop-over on the flight, after leaving the shopping bag containing the time bomb and liquid explosives in the luggage compartment over the seats number 7B and 7C in the plane. KAL 858, with the unchecked belongings which caused the fatal disaster, continued its flight to Bangkok, and nine hours after the time bomb had been set, the plane exploded in the mid-air over the Andaman Sea, off the coast of Burma, killing all people aboard. There is no doubt that the KAL 858 sabotage bombing incident might have been prevented by simple checking of the remaining passengers with their belongings. In order to minimise risks of such attacks in the future, airlines have to undertake hand luggage reconciliation. Even though it is not a scientific method, cabin staff have to make a brief inspection of the overhead luggage compartments and floor space around passengers seats at each stopover point. It is worthwhile to remember that such an inspection might have prevented the explosion on the KAL 858. It may be true that such a proposal would be very difficult to put into operation, because the huge jumbo airliners are complex vehicles with an almost infinite range of potential hiding place for small, but fatal devices. In this respect, designers and manufactures should consider the "No Hiding Place" maxim, and eliminate all dark corners, nooks and other places of

concealment from future aircraft to allow easy visual searches. This is a long term project, but civil aviation security in the future will depend on such far-sighted security considerations.

Finally, it was reported that more than 90 percent of aviation terrorists used false passports for their operations.¹⁶⁷ In the case of the KAL 858 incident, two terrorists also concealed their identities with false passports. In this respect, a high-technology identity document and detection system for the use of false or stolen passports should be introduced to prevent aviation terrorism and the entry of terrorists.¹⁶⁸

IV-4. Conclusion

This Chapter has demonstrated that ensuring aviation security becomes more complex and more urgent. No longer is it simply a matter of passenger safety. The resolution of the TWA hijacking crisis did not enhance the stature of the international community involved and furthermore it also failed to diminish their vulnerability to international aviation terrorism. Thanks to better precautions and firmer responses, aircraft hijackings have decreased since the three-year surge of terror that followed the Arab humiliation in the June war of 1967. However, terrorists have realized that by the right use of foil or fibreglass they can take their weapons through a carelessly operated metal detector or X-ray machine. Even thick clothing can muffle the image of a weapon, and plastic

¹⁶⁷ Paul Wilkinson, "The Lessons of Lockerbie", International Security Review, January/February 1990, PP. 25-26

¹⁶⁸ For further reading on detection system of this subject, see Richard Clutterbuck, Terrorism and Guerrilla Warfare: Forecasts and Remedies, London: Routledge, 1990, PP. 76-80

explosives are easily disguised. Some airports are installing the newest equipment such as Thermal Neutron Analysis(TNA), but most states are not. Unfortunately, despite the increased security measures that have been implemented around the world in the past two decades, terrorists seem to be able to carry out their operations almost at will. Although aircraft hijacking by politically motivated terrorists has declined, it could once again produce a great danger to the safety of passengers and crew members. Airport security will never be 100 per cent perfect but the efforts to improve it have had some success. The most critical element affecting the vulnerability of civil aviation is the fact that most current security programmes were created to prevent aircraft hijackings by terrorists who were initially not well-trained. It has been demonstrated that these types of security systems can be circumvented. It is easy to mould plastic explosives to resemble many common objects such as an athletic shoe. Similarly, powerful explosives can be easily concealed in whiskey bottles and cassette radios. The timing and detonation devices are sophisticated, small in size, and can be easily hidden. All these factors make detection by security personnel extremely difficult.

It is clear that aviation terrorism has now evolved to a point where the international community may need to reassess the whole situation. With the advent of state sponsorship of terrorists operating internationally, the threat against civil aviation has become more complex and the terrorists better trained and equipped. From the statistics relating to successful terrorist operations it seems new ideas and systematic approaches to aviation security against sabotage bombing should be considered. Terrorist tactics simply can not be allowed to succeed or the world will have little chance of achieving peace and stability. To achieve this aim, far-sighted aviation security measures are required

together with a precise discernment for the future threat. The following Chapter will examine the potential future threat.

CHAPTER V

NEW AND POTENTIAL THREATS TO CIVIL AVIATION FOR THE FUTURE: MISSILE ATTACKS

"What Soviet military forces did to a civilian Korean airplane was clearly a criminal act in violation of all the legal norms and standards of international civil aviation. ... The deliberate in-flight destruction of this civilian, unarmed, easily identifiable passenger aircraft by sophisticated fighter aircraft of the Soviet Union, no matter where it occurred, is nothing short of murder. It is flagrant attack on the safety of international civil aviation which should never have occurred and must not be allowed to occur again".¹

"The growing supply of sophisticated weapons and explosives available today to terrorists make them even more dangerous. For example, we know there are small surface-to-air missiles available right now to various terrorist groups. We also know of at least two incidents in which terrorists with these missiles have been arrested near airports. It is only a question of time until someone uses such a missile to shoot down an airliner and murder the innocent persons on board".²

V-1. Introduction

While technological advances have produced a remarkable degree of safety in the air transportation system, unparalleled by any other means of transport, violent attacks against civil aviation have posed a man-made threat for which there are no simple technical solutions. Since terrorists came to the conclusion

¹ UN Security Council, "Provisional Verbatim Record, September 2, Document S/PV. 2470, 1983", Reprinted in International Legal Material, 1983, PP. 1114-1117

² Thomas M. Ashwood, "The Airline Response To Terrorism", in Y. Alexander and Robert A. Kilmarx, Political Terrorism and Business: The Threat and Response, New York: Praeger, 1979, P. 131

that aircraft hijacking was complicated and without any guarantee of a successful outcome, the last decade has been marked by a most serious eruption of sabotage bombing against civil aviation. The modern technology of terrorism has bypassed the ability and resources of the airlines to defeat the sophisticated terrorist. Small amounts of plastic explosives are extremely difficult to detect and simple to slip into the airline luggage of an unsuspecting passenger. While this presents vast danger, the future might be overshadowed by a new threat, missile attack. Such a threat can be identified as falling into two categories: missile attacks by a state against a civilian aircraft that has strayed off its course and missile attacks by terrorist groups against innocent civilian aircraft to achieve their political end. Some experts fear the use of Surface-to-Air missiles(SAM), already known to be in the hands of many terrorist organizations, to attack civilian aircraft. What is worse, as Paul Wilkinson warned, is the possibility of terrorists using chemical and biological weapons to attack civil aviation.³ Although neither chemical nor biological weapons have been used by terrorists, who are all aware of the political price they would pay,⁴ the possibility of their use cannot be ruled out. However, previous experience of missile attacks demonstrate that such attacks should be considered more seriously as a future threat. The international community should now pay great attention to the potential threat of missile attack. This Chapter is designed to provide a perspective outline of such attacks and the future prospects for an international response.

³ Paul Wilkinson, "Putting Lives First?: the problems of creating an effective international regime for aviation security", Inaugural Lecture, October 22, 1991, University of St. Andrews, P. 14

⁴ Richard Clutterbuck, Terrorism and Guerrilla Warfare: Forecasts and Remedies, London: Routledge, 1990, PP. 50-51

V-2. Missile Attacks Against Straying Civilian Aircraft

V-2-1. The Soviet Downing of KAL 007

An attack on Korean Airlines (KAL) KE 007 by Soviet fighter aircraft in the pre-dawn hours of September 1, 1983, shocked the world when it culminated in the greatest single massacre in the annals of international civil aviation to that date. The Soviet fighter aircraft fired two missiles which plunged the airliner, and all 269 passengers and crew aboard the plane, into the Sea of Japan. This act was perpetrated when KAL KE 007 mistakenly deviated into Soviet territorial airspace over a sensitive military base located on Sakhalin Island, on the northern Pacific coast of the Soviet Union. The downing resulted not only in great loss of civilian life and strong international condemnation of a military attack against a civilian aircraft, but also raised serious questions regarding the rule of international law and world order, in ensuring the safety of international civil aviation.

The purpose of this section is to demonstrate that terrorist attacks are not the only threats to the safety of air transportation. The first part examines incidents involving the military interception of civil aircraft by missile attack. Secondly, an analysis of various proposed theories of why KAL007 deviated is provided. Thirdly, Soviet action along with the legal framework of international air law relating to this incident is presented. In addition, it also takes into account the international responses to the downing of the airliner.

V-2-1-1. The Previous Incidents

KAL 007 was not the first aircraft to be shot down by another state or adversary force in peacetime. There had been several previous peacetime incidents in which civilian airliners were fired on by the military forces of a subjacent state and where major casualties subsequently resulted. The international community, however, reacted to these incidents inconsistently, indicating no clearly shared normative expectation in dealing with these crises.⁵ Furthermore, there were factual considerations in the KAL tragedy that were not present in the earlier incidents. As a result, any collective judgement of those earlier incidents may not provide a complete basis for assessing the course of action of the participants in the KAL 007 incident.

The first recorded armed attack on civilian aircraft occurred on April 29, 1952, when an Air France passenger airliner with 12 passengers and 5 crew members, on a routine flight from Frankfurt to Berlin, was attacked by two Soviet fighters while flying in the air corridor established by four-Power agreement for flights across the Soviet Zone. As a result of the attack, two German civilians and a French steward were wounded, but the aircraft managed to land in Berlin.⁶ The same day, the Allied Air Safety Board (AASB) in Berlin

⁵ William J. Hughes, "Aerial Intrusions by Civil Airliners and the Use of Force", Journal of Air Law and Commerce, Vol. 45, 1980, P. 595; Oliver J. Lissitzyn, "The Treatment of Aerial Intruders in Recent Practice and International Law", American Journal of International Law, Vol. 47, 1953, P. 559; Kay Hailbronner, "Freedom of the Air and the Convention on the Law of the Sea", American Journal of International Law, Vo. 77, 1983, P. 490; Farooq Hassan, "A Legal Analysis of the Shooting of Korean Airlines Flight 007 by the Soviet Union", Journal of Air Law and Commerce, Vol. 49, 1983-83, P. 555; Craig A. Morgan, "The Shooting of Korean Air Lines 007: Responses to Unauthorized Aerial Incursions", in Michael W. Reisman and Andrew R. Willard (ed), International Incidents, Princeton, N.J.: Princeton University Press, 1988, p. 202

⁶ Keesing's Contemporary Archives, May 3-10, 1952, P. 12190

sent a strong protest to the Soviet authorities. The Soviet government, however, delivered a counter-protest claiming that the aircraft had been flying outside the air corridor, and that it had ignored orders to land.⁷ The AASB denied the Soviet version, and demanded an immediate investigation, the punishment of those responsible, and the payment of reparation. At the same time, the AASB emphasized that it was in any case "entirely inadmissible and contrary to all standards of civilian behaviour" for such "brutal and unjustifiable" attacks to be made on an unarmed aircraft in time of peace.⁸

After this initial incident, another tragedy occurred on June 23, 1954, when a British-owned Skymaster of Cathay Pacific Airways with 18 people, en route from Bangkok to Hong Kong, was shot down by two Chinese fighters in the sea off Hainan Island. As a result of the attack, 10 people were killed.⁹ After the Chinese government had received strong protests from the British and U.S. governments, it apologized, on July 26, for the downing of the aircraft as a simple mistake, and promised to pay compensation.¹⁰ Subsequently, Chinese government paid £367,000 in compensation on December 13, 1954.¹¹

On July 27, 1955, an Israeli Airliner (El Al) was shot down by Bulgarian fighters near the Greco-Bulgarian frontier, killing all 51 passengers and 7 crew members on board¹² On the same day, Israel denounced the Bulgarian attack on

⁷ Ibid

⁸ Ibid

⁹ Keesing's Contemporary Archives, August 14-21, 1954, P. 13733

¹⁰ Ibid

¹¹ Keesing's Contemporary Archives, December 11-18, 1954, P. 13933

¹² Keesing's Contemporary Archives, August 6-13, 1955, P. 14359

the airliner and demanded the punishment of those responsible, as well as full compensation for the loss of the aircraft and for the families of the 58 passengers and crew who had lost their lives.¹³ In addition to the Israeli reaction, strong protests and demands for compensation were made to Bulgaria by the British government and by the U.S., French, and Swedish government on behalf of their nationals killed in the incident.¹⁴ The Bulgarian Government issued a statement, on August 3, claiming that the airliner had violated its airspace and ignored signals to land, but nonetheless admitted that its air defences had shown hastiness in firing on the airliner before exhausting other means of forcing it to land. At the same time, the Bulgarian government promised to investigate and punish those responsible for the catastrophe, and to take all measures to prevent the repetition of an such incident, while agreeing to pay compensation to all families of the 58 victims.¹⁵ However, Bulgaria changed its position, disclaiming all responsibility and proposing instead to make payments in Bulgarian currency. The case ultimately went before the International Court of Justice with the United States, Israel, and the United Kingdom submitting memoranda. Bulgaria refused to yield to the jurisdiction of the Court, however, and the case had to be dismissed.

The incident claiming the largest number of human lives prior to the 1983 tragedy, and perhaps most comparable to the KAL 007 disaster, occurred on February 21, 1973, when a Libyan Airline B-727 was shot down by an Israeli Phantom F-4E fighter over the Sinai Desert, which Israel considered a war zone.

13 Ibid

14 Ibid

15 Ibid

As a result of the attack 108 of the 118 people on board were killed.¹⁶ In justification of this action, Israel issued an official statement claiming that the Libyan aircraft had violated Israeli air space over a very sensitive Israeli-controlled area and had behaved in a manner that had aroused suspicion and concern regarding its intentions. Israel maintained that the pilot of the aircraft had noted the warnings and interception signals, but refused signals from the intercepting fighters to land. As a further justification, Israeli officials cited intelligence reports that Arab terrorists would attempt to crash an aircraft loaded with explosives, or hijack an airliner, into Israel.¹⁷ However, as a result of international condemnation, the Israeli Government acknowledged its regret, and offered a payment for compensation on an *ex gratia* basis.¹⁸ Yet, demonstrations in the Libyan town of Benghazi, at the funeral service for the 55 Libyan victims, called for vengeance against Israel regardless of any compensation.¹⁹ In essence, several factors contributed to the conciliatory measures taken by the Israel government. Immediately after the incident on February 21, the United Nations General-Secretary, Kurt Waldheim, called for a thorough investigation. Additionally, the International Federation of Airline Pilots' Association (IFALPA), meeting on February 26, called for constructive measures to prevent any further disaster, and endorsed a proposal for an impartial investigation by the International Civil Aviation Organization (ICAO) in order to recommend ways of avoiding future disasters. Nevertheless, the IFALPA decided against

¹⁶ Keesing's Contemporary Archives, March 5-11, 1973, P. 25757

¹⁷ Ibid

¹⁸ Ibid

¹⁹ Ibid, P. 25758

any strike action or boycott of flights to Israel.²⁰ After consideration of the investigation report of the incident, ICAO adopted a resolution on June 4, 1973, strongly condemning the Israeli action which resulted in the destruction of the Libyan civil aircraft and the loss of innocent lives.²¹

A further incident occurred in 1978 when a Korean Air Lines (KAL) B-707, carrying 97 passengers and 13 crew, was fired on by a Soviet fighter during its flights from Paris to Anchorage on April 21, as it strayed over Soviet airspace. Although the airliner managed to an emergency landing on a frozen lake, about 345 kilometres south of Murmansk, two people were killed and 13 injured.²² The Soviet Union's reaction was the release of all passengers except the pilot and navigator, detained for further questioning. On April 30th, the two crew members were finally released.²³ The downing of the aircraft received no international reaction or condemnation since the Soviet Union neither publicly questioned the reasons for the incursion, nor did South Korea condemn the shooting as unjustified. In fact, South Korean President Park Chung-Hui, on April 25, expressed profound gratitude for the quick return of both passengers and crew members.²⁴

Although the moderate reaction to the KAL incident in 1978 appears difficult to reconcile, international condemnation of the use of force against unarmed civil

²⁰ Ibid

²¹ International Civil Aviation Organization, "Council Resolution Concerning Israeli Attack on Libyan Aircraft", June 4, 1973, International Legal Materials, Vol. 12, 1973, P. 1180

²² The Hapdong News Agency (ed), Korea Annual 1978, Seoul, Korea: The Hapdong News Agency, 1978, P. 45

²³ Ibid, PP. 45-46

²⁴ Ibid, P. 46

aviation is the general norm. The previous incidents show that exclusive sovereignty over airspace could not justify shooting down an intruding civilian aircraft.

V-2-1-2. Facts of the Incident

On August 31, 1983, a Korean Air Lines (KAL) Boeing 747 KE 007, one of five regular weekly flights between Seoul, Republic of Korea (ROK) and New York, the United States, departed from John F. Kennedy International Airport, on a one-stop scheduled flight for Kimpo International Airport. This en-route stop occurred at Anchorage International Airport, Alaska, in the United States. At Anchorage, the aircraft was refuelled, serviced for the remainder of the flight to Seoul, and, in accordance with standing company operating procedure, the flight and cabin crews were changed. The flight departed at the planned estimated time of departure (ETD) which, according to standard Korean Air Lines' procedure, was separately calculated for each flight of KE007. According to original estimations, flight KE007 was scheduled for departure at 1220 hours. The airborne time between Anchorage and Seoul was 8 hours and 40 minutes with an estimated arrival at 2100 hours (0600 hours Korean local time). However, owing to the prevailing head winds blowing at less than average strength, the flight time was reduced to 7 hours and 53 minutes by the computer flight plan. Under these circumstances, the routine practice of KAL was to reschedule the Anchorage departure time in order for the flight to arrive in Seoul at 2100 hours. The reasons for rescheduling were twofold. Apart from being the scheduled arrival time, passenger handling and custom service were unavailable prior to that time. Accordingly, the departure from Anchorage was rescheduled

to 1250 hours and KAL KE007 left Anchorage at exactly 1300, with 240 passengers and 29 crew members.²⁵ Apart from Korean passengers, there were many different nationalities on board: forty-seven Americans; forty-four Chinese; twenty-eight Japanese, fifteen Filipinos, six Thais and others. It was due to arrive in Seoul seven hours and fifty-three minutes later, in the early morning hours of September 1, yet it never reached its final destination.

What happened? Soon after its departure from Anchorage, KE007 began deviating to the right (North) of its assigned direct route to Bethel. The deviation resulted in a progressively greater lateral displacement to the right of its planned route. This ultimately resulted in its penetration of adjacent high seas airspace in flight information regions (FIRs) operated by the Union of Soviet Socialist Republics (USSR), as well as of their sovereign airspace overlying portions of the Kamchatka Peninsula and Sakhalin Island and their surrounding territorial waters. The flight plan called for the KAL KE007 to proceed west from Anchorage to Bethel, Alaska, on standard Air Traffic Service (ATS) route J501, and from there continue on a virtually straight line via ATS route R20.²⁶ This route was divided into eight segments, separated by the Very High Frequency Omni-bearing Range Radio Station (VOR)-established over water checkpoints.²⁷

²⁵ International Civil Aviation Organization (ICAO), "Action with Regard to the Downing of the Korean Air Lines Aircraft, December 30, 1983 and Attachment B, Destruction of Korean Air Lines Boeing 747 over Sea of Japan, 31 August 1983, Report of ICAO Fact-Finding Investigation", December 1983, International Legal Materials, Vol. XXIII, 1984, PP. 864-871

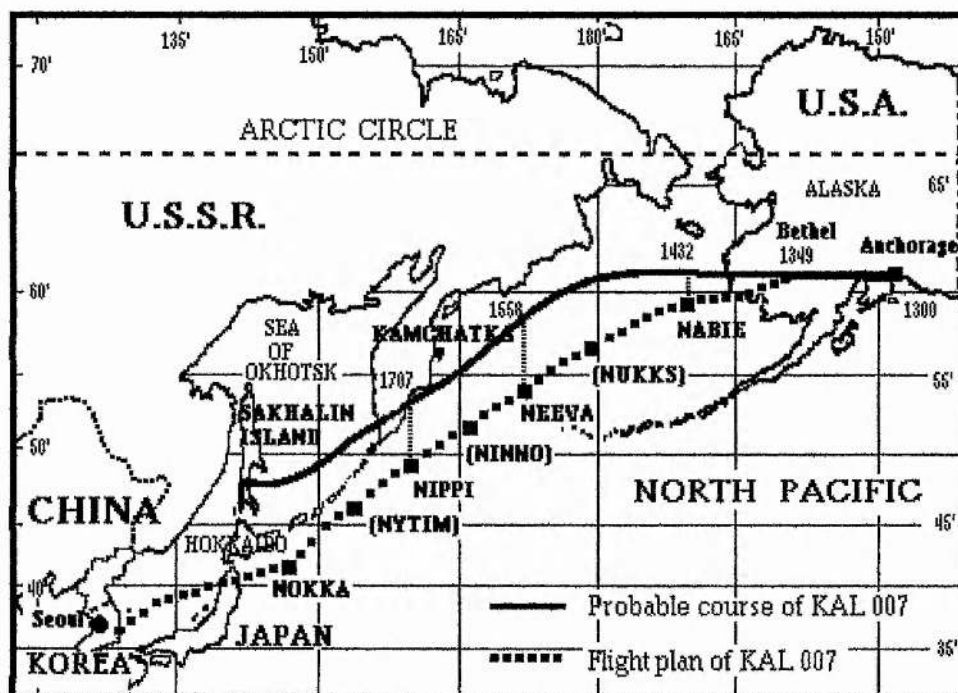
²⁶ Ibid, P. 870

²⁷ Some of the checkpoints, identified by arbitrary names such as NABIE, NEEVA, NINNO, and NOKKA, are obligatory for planes to provided position reports.

The plane reported to Anchorage Air Route Traffic Control Centre (ARTCC) that it passed Bethel at 1349 hours and estimated passing over NABIE at 1430 hours. KAL KE007 continued reporting as if on course. It checked in with NABIE at 1432 hours and NEEVA at 1558. The plane established high-frequency radio contact with Tokyo Aeronautical Station. It reported passing over NIPPI at 1707 hours, estimating that it would reach NOKKA at 1826 hours. At 1815 hours, the plane requested clearance to climb to 35,000 feet, which Tokyo provided at 1820 hours. At about 1820 hours when it was in the vicinity of Sakhalin Island, USSR, the flight was intercepted by Soviet military aircraft. At 1827 hours the aircraft was hit by at least one of two air-to-air AA-3 Anab missiles fired from one of the USSR fighter aircraft, an SU-15 whose pilot had been directed by his ground command and control unit to terminate the flight of KE007. As a direct result of the missile attack, KE007 crashed and sank into the Sea of Japan southwest of Sakhalin Island. The extensive and bitterly contested multinational search for bodies, debris, and the Black Box (containing records of routing and in-flight recordings) from the plane yielded little assistance or value. Only fragmentary pieces of the KE007 aircraft and a small number of items of personal property were salvaged.²⁸

²⁸ Dong-A Il Bo (Seoul, Korea), September 2, 1983; Cho-Sun Il Bo (Seoul, Korea), September 3, 1983; See also, ICAO, Report of ICAO Fact-Finding Investigation, Ibid; United Nations Security Council, "United Nations Security Council Consideration, September 1-12, 1983, in Documents Concerning the Korean Air Lines Incident", International Legal Materials, 1983, PP. 1109-1147; Clarence A. Robinson, Jr., "U.S. Says Soviet Knew Korean Air Lines 747 was Commercial Flight", Aviation Week and Space Technology, September 12, 1983, PP. 20-21

Map 1



V-2-1-3. The Controversy Over Deviation

There is evidence indicating that KAL KE007 flew over the Kamchataka Peninsula and Sakhalin Island before being shot down and its greatest deviation from the flight plane was 350 miles off course. The flight from Anchorage to Seoul was planned to fly along Air Traffic Service (ATS) routes J501, R20 and oceanic transit route (OTR) 1, then to cross Japan's main island, Honshu, and the Sea of Japan. The route was situated within flight information regions (FIRs) Anchorage, Anchorage Oceanic, Tokyo and Taegu, Korea.²⁹ How and why did

²⁹ ICAO Report, op.cit, P. 883

KAL KE007 stray so far off course, so close to one of the most militarily sensitive and dangerous regions in the world? It is extremely difficult to determine exactly what made KAL KE007 stray from its scheduled course since no testimony from any crew members is available. Also the communications which might have shed light on the reasons for KE007's major course deviation; indications of flight crew awareness of their being off track, and vital flight instrumentation, communications and avionics equipment from the wreckage of KE007, could not be utilised after the flight's destruction since it was never recovered. However, there are several potential reasons for KAL KE007's deviation of flight course. They are as follows:³⁰

- a. Deliberate crew members' action associated with fuel saving
- b. Intentional action by some of the crew to carry out a special mission
- c. Mechanical failure of navigation system
- d. Innocent human error of the crew members

V-2-1-3-1. Fuel Saving

Soon after news of the KE007's tragedy became known, rumours surfaced that Korean Air Lines pilots had a reputation for 'cutting corners' and taking risks.³¹ Richard Rohmer, who is the strong advocate of this point of view,

³⁰ Alexander Dallin, Black Box: KAL 007 and the Superpowers, Berkeley: University of California Press, 1985; Richard Rohmer, Massacre 007: The Story of the Korean Airlines Disaster, London: Hodder and Stoughton, 1984; Oliver Clubb, KAL Flight 007: The Hidden Story, New York: Permanent Press, 1985; R. W. Johnson, Shootdown: The Verdict on KAL 007, London: Unwin Hyman, 1986

³¹ Ibid

stressed the KAL's rapid growth, aggressive management, and heavy debts to explain the reason of deviation.³² He said as follows:

"During 1980-81, the cumulative lossess of KAL were \$47.8 million. In 1982 the airline showed a profit of \$6 million after chairman Harry Cho initiated a series of cost-control and expense cutting policies, ... There is no doubt that the cost-cutting was the order of the day, starting with the most obvious of places, operating-fuel burning time in Korean Air Lines' big, modern and very expensive fleet of forty-one aircraft. ... For example, if Flight 007 had been able to shave twenty minutes off its scheduled flying time on August 31, and, on the same day, five others of Harry Cho's fleet had managed to do the same thing(with appropriate bonuses or other incentives for their captains), the saving for the company would be in the order of \$13,000. Given that the airline operates some 130 international flights every week, the opportunity for that scale of flying time and corner cutting is by no means unrealistic. The cumulative results would be in the neighbourhood of half a million dollars a month, or \$6 million a year - almost the amount of Korean Air Lines' profit in 1982 after the massive losses in 1980-81. Even a one-million dollar saving, to say nothing of six million, would be a good business target. ... With this kind of policy in effect, in order to save the airline and their jobs, the pilots would be very much aware of and committed to the whole concept of cost-cutting."³³

This line of argument lacks validity for a number of reasons. With a small amount of money as an incentive, it is almost unthinkable that the KAL management, and the crew, consisting of rational and well informed pilots, would embark on a flight which was virtually certain to be detected and thus was tantamount to suicide. There is no doubt that the pilot of KAL KE007 would have known the reputation of Soviet interceptors, as they had fired two heat-seeking missiles at KAL Flight 902, in 1978.³⁴ There is no evidence that the KE007 crew might have flown deliberately over Soviet territory to save fuel and

³² Richard Rohmer, op.cit, PP. 64-67 and PP. 207-213

³³ Ibid, PP. 66-67

³⁴ The Hapdong News Agency (ed), Korea Annual 1978, op.cit PP. 45-46; Time, September 12, 1983, P. 11

time. In fact, the ICAO found that there were no records of such deviations previously made by KAL pilots.³⁵ Any short cuts were impossible without flying through FIRs of the USSR where such flights would be observed and any irregularity on the part of KAL would have been reported to Japanese ground control³⁶ Any theory of short-cuts is neither consistent with previous records of KAL KE007's pilots nor the distance (350 miles) into Soviet sovereign territory. An alternative route, known as the "Great Circle" route, which would have saved a maximum amount of money was not used by KAL 007 and it was never in close proximity to this route. Furthermore, on the prescheduled course there was no reason to veer over Sakhalin Island, a change that added time, distance and danger.³⁷ Alexander Dallin cited from French sources that KAL management routinely remitted to the crew approximately 60 per cent of the cash equivalent of the saving effected.³⁸ He also said as follows:

".. If, hypothetically, KAL 007 had saved three-fifths of the amount saved by flying the Great Circle route, the \$1,500 would have been divided so that 60 per cent, or \$900, went to the crew(how many members of it) and \$600 to the company. It defies all good sense to take seriously the notion that, presumably with connivance of company officials, the flight courted death and destruction for \$600."³⁹

³⁵ ICAO Report, P. 894

³⁶ Ibid; See also, Mark N. Kramer, "Continuing Controversy over KE007", A Review Essay, Survival, Vol. 28, No. 1, 1986, P. 145

³⁷ David Pearson, "K.A.L.007: What the U.S. knew and when we knew it", The Nation, August 18-25, 1984, PP. 120-121

³⁸ Alexander Dallin, Ibid, P. 38

³⁹ Ibid

Another opponent to the cost-cutting theory, Murray Sayle, using a different calculation of savings, claims that: "The Great Circle route between NEEVA and Seoul is shorter than the Romeo 20 route and in normal circumstances would have provided a valuable saving in fuel, but no pilot would fly over most of the Soviet Union's conventional and nuclear military installations in East Asia in order to save a sum of about US \$2,500".⁴⁰ In fact, R. W. Johnson of Magdalen College, Oxford, argues:

"In fact, the fuel saving hypothesis won't stand up. ICAO looked at it and found no evidence for it or for previous such short-cutting by KAL. Sayle, having originally propagated this theory (and received a journalism prize for it), later abandoned it altogether. The reasons are not difficult to see. First, if KAL were to try such illegitimate fuel-saving techniques, this would be the last (because most dangerous) route on which it would be tried. Two thousand five hundred dollars is really a very small amount to save if it entails putting not only all one's passengers but oneself at risk. To get pilots to take such risks (even supposing one wished to) one would have to offer them incentives far in excess of \$2500. No pilot would risk his neck to save the company - not himself - just \$2500. Finally, any pilot who was knowingly short-cutting would, in this region, be like a cat on hot bricks - desperately aware of the risks he was running, knowing that any moment he was likely to be intercepted by Soviet fighters."⁴¹

While there has been inevitable speculation concerning financial incentives for the flight crew, there is scant indication that they would have earned anything but a word of admonition. There is nothing to support this hypothesis, which requires more South Korean trust in Soviet benevolence and perhaps also a greater belief in Soviet incompetence than the facts appear to warrant.

⁴⁰ Murray Sayle, "Charge and Countercharge", Far Eastern Economic Review, September 22, 1983, P. 28

⁴¹ R. W. Johnson, *op.cit*, PP. 251-252

V-2-1-3-2. Special Mission

The Soviet Union, in its justification for shooting down of KAL 007, claimed that the intrusion of KAL KE007 aircraft into Soviet airspace was a deliberate and carefully planned intelligence operation undertaken by some of the members of the flight crew, presumably on behalf of an American intelligence agency.⁴² There is no doubt that KAL 007 violated the State boundary of the Soviet Union. However, there is no evidence in support of the Soviet contention that it was on a spy mission. The ICAO investigation did not consider further the hypothesis presumed by the Soviet Union Accident Investigation Commission that there was a premeditated deviation from the flight plan route for intelligence gathering purposes.⁴³ In addition, it is very difficult to see why KAL KE 007 would have deviated deliberately to carry out a special intelligence mission when a vast U.S. intelligence network already exists in the northern Pacific, including RC-135 and other reconnaissance aircraft; electronic surveillance ships off the Soviet coast; electronic monitoring stations in Japan and Korea; the Cobra Dane phased array radar network at Shemya in Alaska, and photo-reconnaissance and electronic data from satellites. The U.S. could have obtained information, when required, by these means far more easily and at far lower risk.⁴⁴ Common sense suggests that even the most expert observer, flying some

⁴² Tass statement of September 3, 1983 in Pravda, Reprinted in Current Digest of the Soviet Press, September 28, 1983, P. 1; Press Conference in Moscow, Pravda and Izvestia, September 10, 1983, Reprinted in Current Digest of the Soviet Press, October 5, 1983, P. 1; ICAO Report, op.cit, P. 912; Documents Concerning the Korean Airlines Incident, op.cit, P. 1116

⁴³ ICAO Report, P. 868 and 908

⁴⁴ David Pearson, op.cit P. 116; See also, James Bamford, "The Last Flight of KAL 007: How the U.S. knew so much about what happened", Washington Post Magazine, January 8, 1984, PP. 4-6; Mark N. Kramer, op.cit, P. 143;

six miles high in dim pre-dawn light, is not likely to see anything that U.S. surveillance satellites would not have repeatedly scrutinized and photographed in far greater detail.⁴⁵ Moreover, to carry out a special intelligence gathering mission, a civilian aircraft would require dozens of items of special equipment. The KAL KE007 had certainly not been reconfigured with elaborate and sophisticated electronic intelligence equipment, which is usually large. It was reported that the handling staff in New York and Anchorage had free access to all parts of the aircraft and none of them reported any unusual equipment or structural changes.⁴⁶ The fact that KAL aircraft were open to regular maintenance by airport personnel of various nationalities is in itself an indication that no special equipment was on board.⁴⁷ Moreover, any planning for a special mission would have to accept the great possibility that the plane would be forced down to land in Soviet territory, where it would be completely disassembled as previously demonstrated by the KAL aircraft forced down over Murmansk in 1978. In that case, such special equipment could have been used by the Soviet Union as a political weapon before the world with at least equal effect as in the exhibition of the American U-2 spy aircraft in 1960. In that particular incident, on May 1, 1960, (a fortnight before the opening of the Summit conference in Paris), an unarmed U.S. reconnaissance aircraft was shot down by a Soviet rocket after penetrating about 1,250 miles into Soviet territory. The pilot was

U.S. News and World Reports, September 12, 1983, P. 24; Richard Rohmer, *op.cit.*, P. 204

⁴⁵ Time, September 12, 1983, P. 14; Toronto Gazette, September 3, 1983

⁴⁶ ICAO, "Air Navigation Commission, 1818th Report to Council by the President of the Air Navigation Commission", Document C-WP/7809, February 1984, P. 13; David Pearson, *op.cit.*, P. 123; R. W. Johnson, *op.cit.*, PP.255-256

⁴⁷ Mark N. Kramer, *op.cit.*, P. 143

captured after making a parachute landing and the wreckage of the aircraft was subsequently taken to Moscow and examined by experts. This incident brought about the break-down of the Summit conference even before its opening session in Paris on May 16 which placed the U.S. in an embarrassing position since President Eisenhower was forced to admit that his Administration had been lying when it had earlier asserted that the U-2 was merely a weather reconnaissance aircraft which had lost its way.⁴⁸

Any claims that KAL KE 007 was involved in testing the air defence system of the USSR lack credibility. Mark N. Kramer correctly observes that:

"American military and reconnaissance aircraft could have been-and, indeed, frequently are-used for that very purpose, without the same degree of risk. Carrier-based fighters and RC-135 aircraft, in particular, regularly fly near Soviet territory, and a few have penetrated Soviet airspace to trigger a response from radar warning systems and air defence units. It would have been pointless to use a civilian airliner in this way at such great risk, even if the alleged sponsors of the mission had expected Soviet air defence radars and fighters to be incapable of distinguishing between a 747 and military aircraft."⁴⁹

For all the above mentioned reasons, it is impossible to assert that KAL 007 was on a special mission. It is also unthinkable that an agency of the American Government would jeopardize the lives of 269 innocent civilians in order to obtain information and intelligence readily available by other means.

Recently, Lieutenant Colonel Gennady Osipovich, one of the pilots who shot down KAL 007, revealed his account in a series of articles of what happened on September 1, 1983, in the Soviet newspaper, Izvestia. His account in the 1991

⁴⁸ Keesing's Contemporary Archives, May 21-28 and May 28-June 4, 1960, PP. 17425-17430 and 17437-17411

⁴⁹ Mark N. Kramer, op.cit, P. 143

published interview contradicted the official Soviet version that KAL 007 was on an intelligence mission. He revealed that he saw clearly that his target was not the American RC-135 reconnaissance aircraft that the Soviets at the time maintained they had believed the aircraft to be.⁵⁰ At the same time, he admitted that he was ordered by a high Soviet official to lie.⁵¹ The senior editor of *Izvestia*, Andrei Illesh, concluded that KAL 007's reason for entering Soviet airspace was simply because it was lost. He cites an unnamed member of the Soviet team which investigated the KAL 007 incident as saying: "I do not think the Boeing was on an intelligence flight."⁵² In addition, *Izvestia* said that the Soviets did find the black box, which had vital information, but lied about it to conceal the true story.⁵³

According to the American publication, *Newsweek*, between 1981 and 1982, Aeroflot planes of the Soviet Union went off course 16 times to fly over U.S. military installations, including one occasion at Groton, Connecticut, at the precise moment when General Dynamic Corporation's Electronic Boat Division was launching the first Trident nuclear submarine.⁵⁴ The civilian airlines of the Soviet allies, which includes Lot (the Polish carrier), and the Czechoslovak line CSA, have flown similar spy missions. Given the Soviet bloc's apparent use of civilian aircraft for intelligence gathering, it was perhaps not surprising that USSR could suspect the Republic of Korea and the United States of using the

⁵⁰ *The Sunday Times*, May 19, 1991

⁵¹ *Ibid*

⁵² *The Independent*, February 10, 1991

⁵³ *The Sunday Times*, May 19, 1991

⁵⁴ *Newsweek*, September 12, 1983, P. 22; *Time*, September 12, 1983, P. 10

same methods.⁵⁵ Yet, there is no conclusive evidence of the theory of special missions and most experts, outside the Soviet Union, do not consider this as a possibility.

V-2-1-3-3. Mechanical Failure

The aircraft type of KAL KE007 was Boeing 747-230B, serial number 20559, manufactured in 1972 for Lufthansa. In February 1979 it was purchased by Korean Air Lines and registered in the ROK as HL7442. The Certificate of Registration issued by ROK on February 5, 1979, was permanent. The certificate of Airworthiness was issued by the ROK and renewable on a yearly interval and was last renewed on January 15, 1983. The total amount of airborne travel amounted to 36,718 hours, in which 9,237 landings had been made - well within its designed service life. In addition, it had passed a major overhaul on August 10, 1983, only three weeks before it was shot down. The aircraft had been maintained in accordance with Korean Civil Aviation Bureau (CAB) requirements. KAL KE007 was equipped with three Inertial Navigation Systems (INS), three Very High Frequency (VHF) and two High Frequency (HF) radio transceivers, two transponders, two weather radars, two autopilots, and a variety of other altimeters, indicators compass systems and auto-throttles.⁵⁶

From the earliest days of flying, aircraft have carried magnetic compasses of the kind that guided Christopher Columbus across the Atlantic Ocean in the 15th

⁵⁵ Newsweek, Ibid, P. 12

⁵⁶ ICAO Report, op.cit, PP. 874-875

century, and KAL KE007, in fact, had two aboard. Even the smallest aircraft have magnetic compasses, which are normally reliable, instantly available and need no power. By tradition, the lines of approach and departure to and from airports are also laid out with magnetic headings on air maps, and directions from air traffic controllers in airport towers are given on the same system. One reason is that of safety: if all else fails, the simple, trusty magnetic compass will give the pilot a good idea of where he is going, at night or when there is no landmark below to steer by. Magnetic compasses alone are not, however, reliable enough for any but the shortest air journeys, and are useless near the poles. Aircraft are carried by wind, which will set a plane to one side or other of a chosen magnetic track in ways unpredictable to the pilot. He must therefore, on a long flight, keep constantly checking his position, and as recently as the early 1970s pilots still did this.⁵⁷

In the past two decades, however, a new instrument has revolutionised navigation, making flying far safer and rendering the specialised profession of air navigator all but extinct. This most extraordinary invention is called the Inertial Navigation System (INS), a benign by-product of the space race between the superpowers. All navigation works by establishing a relationship between the moving vehicle and some fixed point of reference: For Columbus, the reference points were the magnetic pole, the sun and the stars. With the INS system the reference point is carried within the aircraft itself, in the form of a tiny platform stabilised by gyroscopes which is unaffected even by the movements of the earth and holds itself steady in relation to the universe itself. The INS can thus detect the rotation of the earth, determine its own latitude and longitude, measure the height at which the aircraft carrying it is flying, and whether its

⁵⁷ The Sunday Times, May 20, 1984

wings are level, all without reference to any outside signal. It does all this and fixes the position of the aircraft with astonishing accuracy to within one nautical mile. Usually the pilot has to do little more than punch into the INS the latitude and longitude coordinates of successive intermediate points along his route, turn the rotary switch that couples the INS to the automatic pilot, and the automatic pilot will then steer the aircraft to its destination. The INS is still only a machine, and any machine, or its power supply, can fail. It is therefore current practice to equip big aircraft like 747s with three independent INS instruments, so that an error in one will be instantly detected by the other two. Electronically linked, they can, in fact, 'vote' among themselves to reject a faulty reading.⁵⁸ INS has reduced navigational error to about one in every 10,000 flights. Undetected failure in the INS itself is even rarer, and no simultaneous failure of a triple INS system has ever been recorded.⁵⁹

According to the Report of ICAO Fact-Finding Investigation in December 1983, the flight crew of KE007 did not report any problem, call for assistance, or indicate in any way that they were unable to comply with the navigational requirements of their assigned route. The possibility of a failure of all three INS must be regarded as extremely remote. The fact that no difficulties were reported, that the flight crew reported upper winds and provided estimated times of arrival (ETAs) and position reports were consistent with the flight plan, suggested that at least two of the INS systems were functioning normally. The progress of the flight appeared normal from the position reports and estimates. The aircraft departed from Anchorage with a defect in the No. 2 compass

⁵⁸ Ibid; Murray Sayle, "KE007: A Conspiracy of Circumstances", The New York Review, April 25, 1985, P. 45; Newsweek, September 12, 1983, P. 10

⁵⁹ Ibid

system, rectification of which was deferred until arrival in Seoul. Four heading reference systems were still available, as well as the standby compass.⁶⁰

V-2-1-3-4. Human Error

The final explanation for the deviation of KAL KE007 may be found in human error. How was it possible that the aircraft was nearly 350 miles off track when it was shot down? As mentioned before, there were three INS systems aboard the KAL KE007 which were easily capable of holding the aircraft within five miles of assigned track. The INS system is programmed on the ground, before take off, with the geographical co-ordinates (latitude and longitude) of the intermediate stages, or 'way-points', of the flight. Even though pilots have been brought up in the INS era with an all-built-infallible system aboard, they can still make mistakes, as the machines require human interaction. There has been much speculation about the possibility that KE007 was misprogrammed - that is, the wrong coordinates were punched into one or more of the INS systems, an error known to have been made occasionally in the last decades of the civil use of inertial systems. In the aviation business, this is called finger trouble.⁶¹ The INS, like any other computer or programmable system, will do exactly what it is told within the limits of its design. Thus, putting in incorrect waypoint coordinates will naturally result in an aircraft going off its designated track. Michael Westlake has expertly phrased this argument as follows:

⁶⁰ ICAO Report, op.cit, P. 895

⁶¹ The Sunday Times, May 20, 1984; Murray Sayle, op.cit, P. 45

"Previous attempts at explaining how the 747 came to be off course, such as suggesting that the captain was flying the so-called "great circle" course from some point along his original path to Seoul, have all relied on the pilots in some way misprogramming their inertial navigation system(INS) so that it took them about 300 miles north of their proper track without them knowing it. Superficially this is an attractive argument because mistakes have been made by pilots using an INS, including at least twice by other Asian airlines, fortunately with only embarrassment as the result. The Atlantic has been a particularly bad area for gross navigational errors."⁶²

Furthermore, Murray Sayle points out that:

"On the North Atlantic, gross errors of navigation have averaged one in ten thousand crossings, or some twelve a year at the present traffic density. Misuse or misprogramming of inertial navigation system is by far the commonest cause of gross error reported, followed by failure to recouple the autopilot to the INS.... The records of the CAA show five cases of gross navigational error since 1975..."⁶³

According to communications received from KE007 during the flight, no evidence was found to indicate that the flight crew of KE007 was aware of the flight's deviation from its planned route in spite of the fact it continued along the same general off-track flight path for some five hours and twenty-six minutes.

Soon after the KAL 007 incident, the FAA ordered the closure of the R-20 route and the route was reopened on September 1983, with two civil air traffic controllers monitoring the military radar screens and checking them against airline flight plans radioed from Anchorage. Airliners that are detected off course are warned by radio from the civil controllers at Shemya. Since October 19, 1983, when the first radar surveillance of the NOPAC routes was begun,

⁶² Michael Westlake, "On course for disaster", Far Eastern Economic Review, October 13, 1983, P. 29

⁶³ Murray Sayle, op.cit, P. 47

however, more than seventeen airliners have been logged off course, including a proportion of those on the R-20 route.⁶⁴

Therefore, it is a strong possibility that factors including human error played a major role in accounting for the deviation of KAL 007.

V-2-1-4. Soviet Action and International Order

V-2-1-4-1. Sovereignty over Airspace

As airspace has been subject to the jurisdiction of the territorial state since the turn of the century, there has emerged a doctrine of international law that a state exercises a complete and exclusive sovereignty over the airspace above its lands and the adjoining territorial sea. Broadly speaking, the basis for granting a subjacent state the right to control the airspace above its territory is similar to that where the holder of patrimony in land should also be given the right to control the airspace directly above it under the domestic law.⁶⁵ In other words, control over airspace is granted because of the existence of the sovereign rights of a state in the land below it. Sovereignty in the airspace is therefore a facet of the totality of interests a state has in its land, known as territorial sovereignty.⁶⁶

⁶⁴ Ibid

⁶⁵ Farooq Hassan, op.cit, P. 561

⁶⁶ Bin Cheng, The Law of International Air Transport, London: Stevens and Sons Ltd, 1962, P. 3; See also generally, Ian Brownlie, Principle of Public International Law (3rd Edition), Oxford: Clarendon Press, 1979; J.G. Strake, Introduction to International Law (10th Edition), London: Butterworth & Co., 1989; Kay Hailbronner, "Freedom of the Air and the Convention on the Law of the Sea", American Journal of International Law, Vol. 77, 1983, PP. 490-520; R. Y. Jennings, "International Civil Aviation and the Law", British Yearbook of International Law, Vol. XXII, 1945, PP. 190-209

A sovereign's right to control its airspace is equally well recognized under the international conventions dealing with civil aviation. The Paris Convention for the Regulation of Air Navigation⁶⁷ was the first major international treaty dealing with civil aviation. The Convention defined that every state, not just the contracting parties, has complete and exclusive sovereignty over the airspace above its territory.⁶⁸ The next important milestone in civil aviation was the Convention on International Civil Aviation signed in Chicago on December 4, 1944.⁶⁹ The principle of sovereignty over airspace was reaffirmed in Article 1 of the Chicago Convention, which provides that:

"The contracting states recognise that every state has complete and exclusive sovereignty over the air space above its territory."⁷⁰

One significant aspect of the Chicago Convention, in contrast to the Paris Convention, is that there is an omission of the freedom of innocent passage in time of peace under the Chicago Convention, the freedom which was recognized under Articles 2 and 15 of the Paris Convention.⁷¹ This omission could be interpreted as significant, in that the concept of complete and exclusive sovereignty now emerges in a strengthened manner under the Chicago

⁶⁷ The Convention was signed on October 13, 1919 and entered into force on July 11, 1972 (Hereafter cited as Paris Convention)

⁶⁸ Paris Convention, Article 1

⁶⁹ The Convention was signed on December 7, 1944 and entered into force on April 4, 1947 (Hereafter cited as Chicago Convention)

⁷⁰ Chicago Convention, Article 1

⁷¹ R. Y. Jennings, *op.cit.*, PP. 197-198

Convention.⁷² While Article 5 of the Chicago Convention appears to qualify the notion of complete and exclusive sovereignty of state by recognizing the right of non-scheduled flights to fly over the territorial airspace of the contracting states without their permission or authorization, the practice of states demonstrates that such provision has become a dead letter as almost all states require prior permission or authorization to fly over the territorial airspace of other states, thus ignoring the principle under Article 5.⁷³ International aviation convention is similar to the broad international law principles applicable to airspace rights. The absolute sovereignty of a subjacent state over its airspace is well recognized among states, and is accepted by the leading treaties on the subject. Consequently, no aircraft is normally entitled to enter the airspace above the territory of a foreign state without the latter's permission.

V-2-1-4-2. Aerial Intrusion and Chicago Convention

Does the principle of sovereignty over the airspace above its territory mean that any aircraft entering without permission is completely at the mercy of the territorial sovereign? The possible action of the territorial sovereign with respect to the intruding aircraft and its occupants may be as follows: it may seek to destroy the intruder; it may attempt to control the movements of the intruder in the airspace in order to compel it to leave or change its course; and it may attempt to exercise jurisdiction through administrative and judicial organs over

⁷² Chee Choung Il, "Aerial Intrusion and Soviet Attack on the Korean Airliner in International Law", Korean Journal of International Law, Vol. 28 No. 2, 1983, P. 122

⁷³ D.W. Greig, International Law(2nd ed), London: Butterworth, 1976, P. 349

the intruding aircraft and its occupants after it has landed on soil.⁷⁴ What action is permissible? Is the territorial sovereign, for example, entitled to attack any intruding aircraft without prior warning?

While the Chicago Convention does not permit unauthorized entry into national airspace of the contracting states, it clearly anticipated the great possibility of an aerial intrusion into the territorial airspace by foreign aircraft. This was shown by Articles 25 and 26 which provide for dealing with the contingency of aircraft in distress and the investigation of accidents. Article 25 of the Convention states as follows:

"Each contracting state undertakes to provide such measures of assistance to aircraft in distress in its territory as it may find practicable, and to permit, subject to control by its own authorities, the owners of the aircraft or authorities of the state in which the aircraft is registered to provide such measures of assistance as may be necessitated by the circumstances. Each contracting state, when undertaking search for missing aircraft, will collaborate in co-ordinated measures which may be recommended from time to time pursuant to this Convention."⁷⁵

It is worthwhile to note that Article 25 refers to provision of assistance to intruding aircraft in distress instead of permitting attacks on such aircraft. The general overtone of the Chicago Convention is that it aims to protect intruding aircraft in distress and aircraft straying into the airspace by providing due regard for the safety of such aircraft. For this purpose, the Council of ICAO formulated special recommendations in accordance with Article 3 of the Chicago Convention, "which contracting states are urged to implement through appropriate regulatory and administrative action".⁷⁶ In one of these

⁷⁴ Oliver J. Lissitzyn, *op.cit.*, P. 559

⁷⁵ Chicago Convention, Article 25

⁷⁶ *Ibid.*, 3(8) Interception, Rules of the Air, Annex II.

recommendations, it has been provided that " Intercepting aircraft should refrain from the use of weapons in all cases of interception of civil aircraft".⁷⁷

Considering the provisions of the Chicago Convention concerning the aerial intrusion of civil aircraft, the shooting down of the KAL KE007 by the Soviet fighter aircraft with missiles is clearly contrary to recommended procedures under the Chicago Convention. For instance, the Soviet attack on the KAL KE007 is contrary to Article 25 of the Convention, which provides for giving assistance to intruding aircraft in distress. Instead of assisting the aircraft, the Soviet fighter aircraft hastily attacked and destroyed the KAL KE007. Moreover, Soviet authorities did not make any efforts to identify the aircraft.⁷⁸ The Soviet Union asserted that the KAL 007 had ignored the efforts of the Soviet fighter aircraft to establish contacts with it and escort it to the nearest airfield on Soviet territory.⁷⁹ The Soviet Union also contended that, over the island of Sakhalin, warning shots of tracer shells had been fired by a Soviet fighter aircraft along its flight path.⁸⁰ Contrary to the Soviet argument, according to the transcript of the tapes between the Soviet fighter aircraft and ground control tower, the pilot of the Soviet fighter aircraft made no mention of any warning shots, except for the firing of the missiles.⁸¹ Recently, Gennady

⁷⁷ Ibid, Attachment A, 7.1

⁷⁸ The Washington Times, September 7, 1983

⁷⁹ Tass Report in Pravda, September 2, 1983, Reprinted in Current Digest of the Soviet Press, September 28, 1983, P. 1

⁸⁰ Tass Statement in Pravda, September 3, 1983, Reprinted in Current Digest of the Soviet Press, September 28, 1983, P. 1

⁸¹ UN Security Council, "Provisional Verbatim Record of the 2471st Meeting, September 6, 1983", Reprinted in International Legal Materials, 1983, PP. 1122-1123

Osipovich, stated that the official Soviet statements that claimed of having fired tracer bullets to alert the Korean pilots to the danger were untrue.⁸² He also said that the problem of all Soviet pilots is that they do not study the civilian aircraft of foreign airlines. He knew all the military planes and all the intelligence planes, but KAL 007 was not like any of them. He was convinced the crew had spotted him because the plane reduced speed as he approached. He interpreted this as a manoeuvre to make his faster fighter overshoot the target. At this time, the order came from ground control: "Destroy the target!"⁸³ Although it was not disputed that KAL KE007 strayed into the Soviet airspace by mistake and not in distress, the aircraft should not have been subject to an armed attack resulting in the destruction of the aircraft. It is clear that exclusive and complete sovereignty over its territorial airspace does not justify a reckless and indiscriminate act of violence or the use of firearms against international civil aviation. One should be reminded in this connection that killing innocent and defenceless civilians is prohibited even in time of war under the customs and the laws of warfare.

V-2-1-5. World Reactions

The KAL KE 007 incident caused a wave of popular revulsion, particularly among the non-communist states of the world, but also from the People's Republic of China and from Yugoslavia, at what was felt to be an inadmissible use of Soviet military force in peacetime. Many of these states decided in the following weeks to impose retaliatory sanctions against the Soviet Union, such

⁸² The Independent, February 10, 1991; The Sunday Times, May 19, 1991

⁸³ Ibid

as the boycott of Soviet goods, the suspension of landing rights for the Soviet airline Aeroflot, or the suspension of their own airlines' flights to and from the Soviet Union.

The ROK Foreign Minister, Mr. Bum-Suk Lee, said on September 2, 1983 that the destruction of the civil aircraft had been a "shameless" and "savage" act, and he called on the Soviet Union to apologize,⁸⁴ to pay compensation for the loss of life and property and to punish the perpetrators of the attack.⁸⁵ It was also reported that the United Kingdom, French, West German, Dutch and Japanese Governments had conveyed to the Soviet ambassadors in their states the seriousness of their concern over the issue.⁸⁶ While some of these were sponsored and exploited by extreme anti-Soviet groups, many were spontaneous and elicited intense feelings, by no means only from friends and relatives of the victims. A number of memorial services and protest rallies were held in Japan, Korea and the United States, and a variety of planned Soviet visits and joint activities were either cancelled or postponed.⁸⁷

84 Soviet Union officially apologised to South Korea for the shooting down a KAL KE 007, on December 18, 1990; See, *The Independent*, December 19, 1990

85 Keesing's Contemporary Archives: Record of World Events, November 1983, P. 32514

86 The British Foreign Secretary, Geoffery Howe, summoned the Soviet ambassador, on September 2, to demand an apology, compensation and the punishment of the offending officers. The West German Government called the shooting "an inconceivable act of unsurprised brutality", while the French Government said that it "placed in question the principles which govern international relations and respect for human life". The Italian Government referred to it as "a mad gesture of war". The Chinese Government expressed its "shock and regret" at the Soviet action. See, *Ibid*

87 The French Government postponed a proposed visit to Paris by Andrei Gromyko, the Soviet Foreign Minister, which had been scheduled for September 5, 1983, and the Netherlands cancelled a Soviet ministerial visit

On September 8, 1983, the Soviet Union vetoed a draft Security Council resolution whose preamble reaffirmed the rules of international law prohibiting acts of violence contrary to the safety of international civil aviation and which recognized the necessity of using only internationally agreed procedures in responding to intrusions into a state's airspace. The preamble also recognized the right under international law to appropriate compensation. The operative portion of the draft resolution deplored the destruction of the Korean airliner and the loss of life, declared that such use of armed force against international civil aviation is incompatible with the norms governing international behaviour and elementary considerations of humanity, and welcomed the agreement of the ICAO Council to consider the incident.⁸⁸ Therefore, it is indefensible that the Soviet Union rejected this draft Security Council resolution while recognizing these measures in principle as a signatory to Chicago Convention. The political expediency of this must be viewed as limited in light of the international community's strong reaction and condemnation to this behaviour.

The International Federation of Air Line Pilots Association (IFALPA), as a non-political, professional organization, deplored and condemned the brutal action of the USSR on September 6, 1983, and approved a recommendation to its members not to fly to the Soviet Union for sixty days and requested other international professional organizations to take similar actions aimed at demonstrating the outrage of the civil air transport industry and of the world generally at this incident.⁸⁹ Pilots of the Scandinavian Airlines System (SAS) which had been planned for September 13, 1983. Singapore, Malaysia, Thailand and the United Kingdom also cancelled meetings with Soviet ministers and officials. See, *Ibid*, P. 32514 and 32516

⁸⁸ UN Document S/15966/ Rev. 1, September 12, 1983

⁸⁹ Action Taken by the International Federation of Air Line Pilots (Press Statement), September 6, 1983 and Open Letters to the World's Press by R.F.

declared a 60 day ban on flights to the Soviet Union, starting from September 7, 1983, while Finnish and Italian pilots also refused to fly to the Soviet Union for a period of 60 days, following a recommendation to this effect which was approved by the IFALPA. The recommendation, which was not binding on members, was endorsed by the British Air Line Pilots' Association (BALPA), which banned all flights to the Soviet Union, and also by Dutch, West German, and Irish associations. The IFALPA ban on flights to and from the Soviet Union, on September 7, was suspended effective from October 3 in the light of the evident determination among ICAO member states to achieve an international instrument to prevent any recurrence of a tragedy similar to the KAL KE 007 incident.⁹⁰ In addition to the above actions by pilots' associations, a large number of Western governments, including those of the United States, Canada and Japan also suspended Aeroflot landing rights in their states for a fortnight from September 15 to 28, although in some cases for a longer period up to 60 days.⁹¹

Meanwhile, the ICAO Council met at an extraordinary session to consider the KAL 007 incident at the request of the ROK and of Canada, between 15-16 September 1983, and adopted a resolution, deploring "the destruction of an aircraft in commercial international service resulting in the loss of 269 innocent

Tweedy, President of IFALPA, September 9, 1983, in Documents Concerning the Korean Air Lines Incident, International Legal Materials, 1983, PP. 1218-1219

⁹⁰ Keesing's Contemporary Archives: Record of World Events, November 1983, PP. 32516-32517

⁹¹ Japanese Suspension of Flights between Japan and the Soviet Union and Resolution of the House of Representatives, statement by Mr. Masaharu Gotoda, Chief Cabinet Secretary, September 9, 1983 (Press release from the Embassy of Japan in Washington, D.C., dated September 14, 1983), in Ibid, International Legal Materials, 1983, PP. 1201-1204

lives." It recognized that "such use of armed forced against international civil aviation is incompatible with the norms governing international behaviour and elementary considerations of humanity and with the rules, standards and recommended practices enshrined in the Chicago Convention and its Annexes and invokes generally recognized legal consequences." and reaffirmed "the principle that states, when intercepting civil aircraft, should not use weapons against them."⁹² The resolution, which was adopted by 26 votes in favour, with 2 opposed (the USSR, and Czechoslovakia), and 3 abstentions (India, Algeria, and China), directed the ICAO Secretary-General to institute an investigation to determine the facts and technical aspects relating to KAL KE007 and its destruction and to provide an interim and complete report. In this resolution, ICAO council also instructed the Air Navigation Commission urgently to review the provisions of the Chicago Convention, its attachment A to Annex 2 and other related documents; to consider possible amendments to prevent a recurrence of such a tragic incident, while examining ways to improve the coordination of communication systems between military and civil aircraft and air traffic control services, and to improve procedures in cases involving identification and interception of civil aircraft.⁹³ The Council also agreed by consensus to include in its work programme and examine with the highest priority the question of an amendment to the Chicago Convention involving an undertaking to abstain from recourse to the use of force against civil aircraft.⁹⁴ This resolution was later endorsed by the ICAO Assembly on October 1, 1983 by votes of 65 in favour,

⁹² ICAO Document, 9416-C/ 1077, C-Min. Extraordinary, 1983

⁹³ Ibid

⁹⁴ Ibid

10 against, and 26 abstentions.⁹⁵ On March 6, 1984, after consideration of the Secretary-General's and the Air Navigation's reports, a resolution was adopted by ICAO Council. The resolution reaffirmed that, whatever the circumstances which may have caused the KAL 007 to stray off its flight, the Soviet action violated international law. More important than apportioning blame, however, was the question of avoiding future incidents. This was to be accomplished through an amendment to the Chicago Convention. On May 10, 1984, the ICAO Assembly then adopted unanimously an amendment to the Convention on International Civil Aviation with regard to the interception of civil aircraft. This amendment is intended to address the problem of the interception of civilian aircraft and settle the problem of the use of force against civil aircraft. In addition, the ICAO Council also decided to improve the coordination between military and civilian communications systems and air traffic control agencies. The main proposals for amendment of the Chicago Convention were presented by France and Austria, the United States, the USSR, Ecuador, the Latin American Civil Aviation Commission (LACAC), and the Republic of Korea.⁹⁶ As a result, the Protocol relating to an amendment to the Convention on International Civil Aviation (Article 3 bis), providing the general desire of contracting states to reaffirm the principle of non-use of weapons against civil aviation in flight, was produced. The new Article 3 bis reads as follows:

- (a) The contracting states recognize that every state must refrain from resorting to the use of weapons against civil aircraft in flight and that, in case

⁹⁵ ICAO, Document 9409, A24-EX, Report and Minutes, 1983

⁹⁶ News from International Organizations, "ICAO, 25th Session (Extraordinary) of the ICAO Assembly", Air Law, Vol. IX, No. 3, 1984, PP. 188-189

of interception, the lives of persons on board and the safety of aircraft must not be endangered....⁹⁷

The provision of Article 3 bis did not break new ground since it only formally reorganized a generally accepted principle in international law.⁹⁸ However, the amendment of the Convention on International Civil Aviation, though merely reaffirming the existing principle of the prohibition of the use of weapons against civil aircraft in flight, constitutes an important step forward in preventing such a tragedy in the future.

V-2-1-6. Closing Remarks

The overall purpose of this section has been to demonstrate that the use of force against civilian aircraft cannot be justified under any circumstances, even in the event of breaching another state's sovereign airspace. In particular, the Soviet downing of KAL 007, resulting in the needless killing of 269 innocent civilians, exemplifies totally uncivilized behaviour in breach of international law and norms which the Soviet government previously, in the Chicago Convention and other agreements, had declared and promised to adhere to. In my analysis of possible reasons for this deviation, it has been shown that the Soviet justification for attacking KAL 007, on the grounds that it was on an intelligence gathering mission over strategically sensitive airspace, is totally groundless. In addition,

⁹⁷ "Protocol relating to an amendment to the Convention on International Civil Aviation, [Article 3 bis]", 1984, reprinted in International Legal Materials, Vol. 23, 1984

⁹⁸ Jean-Louis Magdelenant, "The Use of Force against Civil Aircraft: The Aftermath of the KAL Flight 007 Incident, Canadian Yearbook of International Law, 1984, P. 305

other possible explanations have been explored to provide an adequate picture of the events that lead to the destruction of the Korean airliner in 1983.

The main purposes for this are twofold. First, it is important to recognize that missile attack against civilian aircraft is not a recent experience for the international community. As such, valuable lessons should have been learned, and can still be drawn, from the KAL 007 and other incidents by decision-makers in order to develop safety regulations and effective international legal instruments aimed at preventing any such future incidents. From an international legal standpoint, it is unfortunate that the Chicago Convention has failed to provide enforcement mechanisms in dealing with intrusions by civilian aircraft into sovereign airspace which result in a military attack. In the aftermath of the KAL 007-incident, ICAO recognized some of these problems and proposed a protocol of amendment to the Chicago Convention on May 10, 1984. Yet, by late April 1987, only 22 states had ratified the Convention which is short of the mandatory 36 states needed to make it binding for all 102 member states. Furthermore, the existing disputes over legal terminology within this Protocol along with other problems are unlikely to be resolved in the short term.⁹⁹

In the lack of international determination vis-a-vis missile attack against civilian aircraft, an American aircraft carrier USS Vincennes shot down an Iranian commercial airliner over the southern Persian Gulf on July 3, 1988 after mistaking it for an attacking F-14 fighter jet, which resulted in the deaths of 290 passengers and crew members. Iran Air Flight 655 was on a scheduled run between the Iranian coastal city of Bandar Abbas southwest across the Strait of

⁹⁹ Craig A. Morgan, op.cit, P. 230; For further reading on the problems of the amendment of the Chicago Convention, Bin Cheng, "The Destruction of KAL Flight 007, and Article 3 Bis of the Chicago Convention", Reprinted from Air Worthy. Liber Amicorum. Honoring Professor Dr. I. H. Ph. Diederiks-Verschoor, Duventer: Kluwer, 1985

Hormuz to Dubai in the United Arab Emirates when it was shot down.¹⁰⁰ This disastrous incident invited immediate comparison with the KAL 007 incident because Iran accused the United States of a deliberate attack. However, Admiral William Crowe, Chairman of the Joint Chiefs of Staff, was quick to dismiss parallels between the two incidents. The Iranian airliner, he pointed out, had flown into a war zone at its own risk unlike KAL 007 which had merely strayed into Soviet airspace.¹⁰¹ In defence of the U.S. action, he also emphasised that the incident had to be viewed against the growing hostilities in the Gulf and the Iraqi missile attack against the USS Stark. In that incident, an Iraqi warplane fired missiles at the Stark, killing 37 U.S. sailors. The Navy had blamed the ship's senior officers for taking inadequate defensive measures, and the captain and chief weapons officer were forced to resign. As a result of the attack, the U.S. Navy had changed its rules of engagement for the Persian Gulf. Whereas officers previously had been told to hold their fire until an approaching ship or aircraft performed an overtly hostile act, Navy warships and planes were now allowed to shoot at any craft that refused to heed warnings and approached in a threatening manner. The U.S. issued an official notice to aviators about the new procedures and the need for airmen to identify themselves and state their intentions when queried.¹⁰² Because of the new rule, and the effect the forced resignation of the captain and chief weapons officer of the Stark must inevitably have had on other U.S. Navy officers, the downing of a civilian jetliner over the congested air and sea lanes in the southern gulf had been, in effect, an accident waiting to happen.

¹⁰⁰ The Times, July 4, 1988

¹⁰¹ Facts on File, July 8, 1988, P. 489

¹⁰² Ibid, P. 490

Unlike the Soviet Union, the U.S. government quickly expressed its deep regret and offered to pay compensation to the families of victims.¹⁰³ By then it had become clear that the Reagan administration did not have much of choice. While the U.S. authorities originally claimed that the Iranian aircraft was outside the commercial air corridor over the Strait of Hormuz, it had to admit that the airliner was flying well within its assigned corridor. In addition, while the U.S. Navy claimed that the aircraft was descending towards the USS Vincennes, other data confirmed that the aircraft was cruising at a normal altitude.¹⁰⁴ Subsequently, the U.S. Defence Department, in its final report on the shooting down of the Iranian airliner released on August 19, 1988, admitted that the Vincennes had made several mistakes.¹⁰⁵ This was confirmed by the ICAO's investigation. According to the ICAO report, the shooting down of the Iranian Airbus was in large part a result of poor planning by the U.S. Navy. In particular, it cited the fact that American Warships were incapable of monitoring the civilian air-traffic-control radio frequencies that would have enabled the Vincennes to identify the approaching radar blip as a commercial airliner.¹⁰⁶

The shooting down of the Iranian airliner once again provides a useful lesson in that international community must take all necessary measures to arrange for the effective coordination of civilian flight operations and military activities as well as better routing arrangements to prevent another disaster. At the same time, this effectively illustrates the urgency with which the international community

¹⁰³ Keesing's Record of World Events, September 1988, P. 36169

¹⁰⁴ Facts on File, July 8, 1988, PP. 490-492, July 15, 1988, P. 506 and September 2, 1988, PP. 638-639

¹⁰⁵ Keesing's Record of World Events, September 1988, P. 36170

¹⁰⁶ ICAO Doc. C-WP/8708, November 7, 1988

must devise multilateral political and economical sanctions against offending states along with effective legal instruments in order to prevent incidents of this sort from occurring in the future; and to provide the necessary enforcement mechanism in international law for just and swift compensation to governments and families of victims.

A second point worth mentioning stems from a different area of potential threat to civil aviation, although it is not properly connected to the KAL 007 incident. Some of the shooting down incidents provoked terrorist attacks and they could be cited as justification for retaliation in kind. For example, after the shooting down of a Libyan airliner by Israeli fighters in 1973, Libya reportedly provided Arab terrorists with Surface-to-Air Missile(SAM) to shoot down an El Al plane as an act of revenge. According to most aviation security specialists and counter-terrorist experts, international terrorist groups and state-sponsors of terrorism are likely to use surface-to-air missiles in the near future against civilian airlines. As the international community has learnt valuable lessons from terrorist attacks on aircraft over the past two decades, evolving from hijackings to sabotage bombings in-flights, coupled with subsequent security measures, the method of missile attack will become an attractive solution for terrorists. Furthermore, the vast arms-trade in areas of conflict around the world places new, sophisticated weaponry within the attainable reach of terrorist groups, and to counter this adequate contingency plans must be drawn up on a multilateral basis. This subject will be discussed in the following section in detail.

V-3. Terrorist Missile Attacks Against Civil Aviation

V-3-1. Technical Development in Weapon System

In the last three decades, one of the most significant developments has taken place in major weapons systems and this technological development has created more opportunities for terrorists in terms of weapons and targets. The rapid absorption of new modern technologies by the international community and our growing dependence on them have created many high-value targets such as nuclear power stations and civil aircraft in flight. Similarly, developments in electronics, microelectronics, and the trend toward miniaturization and simplification have resulted in a greater availability of smaller weapons with longer ranges and more accuracy that are also simpler to operate. One of the most dramatic developments in individual weaponry is man-portable precision-guided munitions (PGMs). Man portable PGMs are lightweight and easy to operate. They usually can be carried and operated by a single man. The U.S.-made Stinger, the British-made Blowpipe, and the Soviet-made SA-7 missiles are the representative examples of man-portable PGMs. These are shoulder-fired, anti-aircraft missiles that have infra-red, heat-seeking sensors in the projectile that guide it to the heat of an aircraft engine. It is known that more than 50 states possess the SA-7 missiles, and there is no doubt that all these states maintain strict security measures to prevent outflow of the weapons. However, some states, including Libya, have supplied PGMs to terrorist organizations. It is absolutely clear that in the hands of terrorists, man-portable missiles are not likely to be used against tanks and fighter aircraft. Of Particular concern is the prospect of civilian airliners being shot at by portable hand-held surface-to-air missile (SAM) and anti-tank rockets as they land at or take off from airports.¹⁰⁷

Dr Richard Clutterbuck, an international authority on terrorism, pointed out concisely the great threat of missile attacks in the following terms:

"Recent years have seen increasing use of expensive and sophisticated surface-to-surface and surface-to-air missiles (SSM and SAM) by terrorists, generally of Soviet or East European origin and redirected by Arab governments, notably Colonel Gadafi's. Continuing development of these weapons for use by regular armies will ensure that new and more efficient versions will become available for terrorists."¹⁰⁸

With increased airport security, the possibility of placing explosive devices on civil aircraft is becoming more difficult, but now the same destructive result can be achieved far more easily by using modern missiles or rockets.

V-3-2. Current Picture of Terrorist Missile Attack

The use of surface-to-air missiles and anti-tank rockets by terrorists is not new. On September 5, 1973, Italian police arrested five Arab terrorists armed with SAM-7 surface-to-air missiles. The terrorists had rented an apartment on the flight path to Rome airport and were planning to shoot down an El Al airliner aircraft coming in to land at Rome airport.¹⁰⁹ This affair was a considerable embarrassment to Egyptian authorities, because the SAM-7s were traced back to

¹⁰⁷ Donald J. Hanle, Terrorism: The Newest Face of Warfare, New York: Pergamon-Brassey's International Defense Publishers, Inc., 1989, P. 185; Arie Ofri, "Intelligence and Counterterrorism", ORBIS, Spring 1984, P. 49; Andrew J. Pierre, "The Politics of International Terrorism", ORBIS, Vol. 19, 1975-76, P. 1256; Frederick C. Dorey, Aviation Security, London: Granada, 1983, P. 142

¹⁰⁸ Richard Clutterbuck, op.cit, P. 175

¹⁰⁹ Christopher Dobson and Ronald Payne, Appendix B: The Chronology of Terror: 1968-1987 in War Without End: The Terrorists: An Intelligence Dossier, London: Sphere Books, 1987, P. 366

a batch supplied to him by the Soviet Union. It is believed that what had happened could be attribute to pressure from the Libyan leader, Gadafi, who was then urging the unification of Egypt and Libya. The Egyptian government decided to supply some of these new modern missiles so that the Libyan army could learn how to use them. However, the Soviet-made SAM-7s were directly re-routed to the terrorists.¹¹⁰ The plot of the missile attack on El Al derived from the appalling incident of February 21, 1973, when a Libyan B-727 was shot down over the Sinai desert by an Israeli fighter, killing 108 innocent people aboard.¹¹¹ The Libyan people called for vengeance against Israel. Gadafi urged the other Arab states to send their warplanes against Israel's major cities and to destroy Israeli airliners wherever they could be found.¹¹²

In addition, on January 5, 1974, two hundred and twenty soldiers and two hundred police sealed off five square miles around Heathrow International airport in London after receiving reports that terrorists had smuggled in SA-7 anti-aircraft missiles by using the diplomatic pouches of Arab embassies, and planned to shoot down an El Al airliner.¹¹³ And, on January 13, 1975, the attempt to shoot down an El Al plane with a missile by Arab terrorists was believed to have brought civil aviation to the brink of disaster. Two terrorists drove their car onto the apron at Orly airport. They set a rocket launcher up and fired at an El Al airliner which was about to take off for New York with 136

¹¹⁰ Christopher Dobson and Ronald Payne, The Carlos Complex: A Pattern of Violence, London: Hodder and Stoughton, 1977, P. 134

¹¹¹ Keesing's Contemporary Archives, March 5-11, 1973, P. 25757

¹¹² Ibid

¹¹³ Edward F. Mickolus, Transnational Terrorism: A Chronology of Events, 1968-1979, London: Aldwych Press, 1980, P. 428

passengers on board. The Israeli pilot took evasive action as the rocket crashed into and through the fuselage of a Yugoslav DC9 waiting nearby to embark passengers for Zagreb. It failed to explode and a policeman and a steward were slightly injured.¹¹⁴ It is known that, once again, an El Al airliner was chosen as a target by Gadafi as one of his attempts to avenge the loss of the Libyan civil airliner shot down by the Israelis over the Sinai Desert on February 21, 1973.¹¹⁵

This form of aviation terrorism is on the increase. The following Table V-1 on the next page illustrates the development of this type of attack against aircraft.¹¹⁶

¹¹⁴ Christopher Dobson and Ronald Payne, The Carlos Complex, op.cit, P. 53

¹¹⁵ Ibid

¹¹⁶ Data are compiled from U.S. Department of Transportation, FAA, Aircraft Hijackings and Other Criminal Acts Against Civil Aviation Statistical and Narrative Report: Updated to January 1, 1986; Edward F. Mickolus, Transnational Terrorism: A Chronology of Events, 1969-1979, London: Aldwych Press, 1980; Christopher Dobson and Ronald Payne, The Carlos Complex: A Pattern of Violence, London: Hodder and Stoughton, 1977; Dennis Elsenberg and Eli Landau, Carlos: Terror International, London: Corgi Book, 1976; Facts on File; Keesing's Contemporary Archives; David Learmount, "Is Nothing Safe?", Flight International, January 29-February 4, 1992, PP. 20-26

Table V-1

**Missile Attacks against Aircraft
(1973-1991)**

Year	No. of Events	Casualties*
1973	1	0
1974	0	0
1975	2	3(I)
1976	1	0
1977	0	0
1978	1	48(K)
1979	1	59(K)
1980-1983	0	0
1984	1	0
1985	2	0
1986	1	60(K)
1987	7	141(K)
1988	2	6(K)
1989	2	5(K) /1(I)
1990	0	0
1991	3	71(K)
Total	24	390(K) /4(I)

* K=Killed / I=Injured

Since 1984, the SAM missile attacks have gradually increased. On September 21, 1984, Afghan counter-revolutionaries fired a surface-to-air missile and hit a DC-10 Ariana Airliner with 308 passengers. The explosion tore through the aircraft's left engine and damaged its hydraulic system and wing containing the fuel tank. The Captain of the aircraft, however, managed to land the aircraft safely at Kabul International Airport.¹¹⁷ Another significant incident took place on April 4, 1985. A terrorist of the Abu Nidal Organization fired two R.P.G.

¹¹⁷ U.S. Department of Transportation (F.A.A.), Worldwide Significant Acts Involving Civil Aviation, 1984, P. 14

rocket at an Alia airliner as it took off from Athens airport. Although the rocket did not explode, it left a hole in the fuselage.¹¹⁸

It is not uncommon to find surface-to-air missiles in terrorist and insurgent arsenals. In addition, while fewer groups possess the sophisticated Soviet-made RPG-7 and RPG-7V anti-tank grenade launchers, the list of those who do includes most of the Palestinians who reportedly even have their own manufacturing facility, Iranian militias in Lebanon, German Red Army Faction, the Provisional Irish Republican Army (PIRA), and various African and Central American insurgents. At least a dozen terrorist and insurgent groups are known to possess man-portable Surface-to-Air missile weaponry (discussed below), including various Cuban surrogates, Colombian drug dealers, the U.S.-backed contras' in Nicaragua, and a number of African, European, and Palestinian terrorist organizations.¹¹⁹

It is quite clear that the possibility of frequent use of missiles may be encouraged by the rapid proliferation of missile weaponry and the publicity gained by using such modern weapon systems.¹²⁰ The danger of airborne aircraft being attacked must be seriously considered a possibility for the future, though it may not remain the most probable one.

¹¹⁸ U.S. Department of Defence, Terrorist Group Profiles, Washington D.C.: U.S. GPO, 1989, P. 7

¹¹⁹ James Adams, Trading in Death: Weapons, Warfare and the Modern Arms Race, London: Hutchinson, 1990, PP. 60-61; Neil C. Livingstone, op.cit, P. 139; Paul Wilkinson, "Terrorism: International Dimensions", in William Gutteridge (ed), The New Terrorism, Institute for the Study of Conflict and Terrorism, 1986, PP.39-40

¹²⁰ Arie Ofri, op.cit, P. 50

V-3-3. Type of Missile Weaponry Available to International Terrorists

V-3-3-1. Blowpipe Surface-to-Air Missile

The British Blowpipe Surface-to-Air missile is a weapon designed for the defence of forward-deployed troops against close-range low-level air attack. To carry out this role effectively the weapon is compact, light, and simple so that it can be both carried and operated by a single man.¹²¹ The Blowpipe missile is entirely self-contained with no external power requirements, and consists of two main components: the missile, sealed within its launching canister, and the aiming unit.¹²² The Blowpipe does not rely on passive infra-red guidance to find its target but rather is guided by an aimer who steers the missile to its target by means of a radio link. It can be brought into action very quickly, and reloading time is a few seconds. The Blowpipe SAM is 1390 millimetres long and weighs 11.1 kilograms. Apart from the advantage of mobility, it can destroy an aircraft flying at an altitude of around 2010 meters over a range of 4025 meters.¹²³ The operator lifts the Blowpipe to his shoulder, acquires the target visually with his monocular sight and then initiates the system. It is known that Afghan rebel

121 R. T. Pretty, Jane's Weapon System, London: Macdonald and Jane's Publishers, 1977, P. 96

122 Ibid

123 Christopher Chant, Air Defence Systems and Weapons: World AAA and SAM Systems in the 1990, New York: Brassey's Defence Publishers, 1989, PP. 30-31

forces, Angolan rebel forces, Argentina, Canada, Chile, Ecuador, Nigeria, Oman, Qatar and the United Kingdom are employing the Blowpipe SAM.¹²⁴

V-3-3-2. Javelin Surface-to-Air Missile

The British Javelin Surface-to-Air missile is an advanced version of Blowpipe designed to deal more effectively with battlefield targets such as combat helicopters, which can launch their anti-tank missiles at range up to 4,115 meters.¹²⁵ Targeting at greater range is aided by the employment of semi-automatic command to line of sight guidance, requiring the operator merely to keep the target centred in his sight, rather than to guide the missile. The performance of Javelin is such that the manufacturer has opted to develop a series of lightweight multiple launchers(LMLs), of which there are two man-portable configurations viz man-portable with a seated operator; man-portable with a standing operator, to increase its operational flexibility. The man-portable model for a seated operator can be traversed 360° and, without missiles, weighs 38 kilograms. The man-portable model for a standing operator can also be traversed 360° and without missiles weighs 30 kilograms. Both man-portable models are easily transportable in an average size car. The Javelin SAM can attack an aircraft flying at an altitude of around 1,980 meters over a range of 5,485 meters.¹²⁶

¹²⁴ Ibid, P. 31; Facts on File, September 25, 1987, P. 695; Facts on File, January 16, 1987, P. 20

¹²⁵ Ian V. Hogg(ed), Jane's Infantry Weapons: 1984-85, London: Jane's Publishing Co., 1984, P. 680

¹²⁶ Christopher Chant, op.cit, PP. 31-34

V-3-3-3. SA-7 Grail Surface-to-Air Missile

Developed in the early 1960s, the Soviet SA-7 Grail SAM is known in Soviet service terminology as the Strela-2. It is known that it is a simple weapons, and was first used in combat during the 1967 Six-Day War and later during the 1973 Arab-Israeli War.¹²⁷ The weapon is operated by a two-man team, one of whom carries the firing unit and a missile, and the other carrying a reload missile. It is tube-mounted and fired from the shoulder. The heat-seeking missile was often effective against helicopters and low-flying aircraft despite counter-measures which included the use of decoy flares and deflected helicopter exhaust.¹²⁸ During the Yom Kippur War, McDonnell Douglas A-4 Skyhawk light attack aircraft of the Israeli air force on several occasions returned to base with damaged jet pipes as the result of a hit by an SA-7.¹²⁹ If the missile fails to find a target within 15 seconds or range of about 6,500 meters, it self-destructs. It is reported that though an upper altitude limit of 1,500 meters is often given for the SA-7, there is a well documented instance of an Omani air force Hawker Hunter being hit by such a missile while flying at 3,505 meters. Overall length of the weapon is 1,500 millimetres and the weight is in the region of 15 kilograms.¹³⁰ A useful, easily handled weapon against low-flying aircraft, it has been adopted by a number of Soviet backed guerrilla groups and terrorists organizations

¹²⁷ Christopher Dobson and Ronald Payne, The Terrorists: Their Weapons, Leaders and Tactics, New York: Facts on File, 1982, P. 116

¹²⁸ Christopher Chant, op.cit, P. 69

¹²⁹ Ray Bonds(ed), The Soviet War Machine: An Encyclopedia of Russian Military Equipment and Strategy, London: Salamander Books, 1976, P. 228

¹³⁰ Christopher Chant, op.cit, PP. 69-70; Philip Warner, Firepower: From Slings to Star Wars, London: Grafton Books, 1988

throughout the world. It is also known that more than 50 states all over the world including Iran, Iraq, Lebanon, Libya, Afghanistan, Algeria, North Korea, and Cuba are employing the SA-7 missile.¹³¹ It is a most worrisome fact that a large number of SA-7 are in the hands of terrorists and guerilla organizations.¹³²

V-3-3-4. SA-14 Gremlin Surface-to-Air Missile

The Soviet SA-14 Gremlin missile was introduced in the mid 1980s as a replacement for the elderly and limited SA-7 series surface-to-air-missiles. Unlike most SAMs which have been designed to be fired from the shoulder, this system is an ideal weapon for terrorists. The SA-14 Gremlin is only 1,300 millimetres long and weighs 9.9 kilograms, making it very easy to transport and conceal in a trunk. At the same time, it can destroy an aircraft flying at an altitude of around 5,500 meters over a range of 6,000 meters.¹³³ If terrorists were to survey the flight paths of any international airport where aircraft are flying within the range of this system, it would become apparent that an attack could be launched from a very large geographical area.

V-3-3-5. RPG-7 Surface-to-Surface Missile

The Soviet-made RPG-7 missile is standard anti-armour weapon of soviet infantry. The RPG-7 is the missile most commonly used by terrorists as they

¹³¹ Christopher Chant, Ibid, P. 70

¹³² Andrew Cockburn, The Threat: Inside the Soviet Military Machine, London: Hutchinson, 1983, PP. 132-133

¹³³ Christopher Chant, op.cit, P. 79

have been lavished Arab states, some of whom pass them on to Arab terrorists and also to European terrorists. The weapon was introduced in 1962 and still remains an effective system. The RPG-7 is able to penetrate 320 millimetres of armour, with its hollow charge projectile of 85 millimetres calibre weighing 2.25 kilograms.¹³⁴ It is also easy to transport because of its small size and light weight. The weapon is 953 millimetres long and not more than 10 kilograms including projectile.¹³⁵ The RPG-7 is in service in China, Syria, North Korea and Eastern Europe. It is also in the hands of many terrorist organizations. It is known that the Palestinian terrorist Organization, Al-Fatah, has its own RPG factory.

V-3-3-6. Redeye Surface-to-Air Missile

The U.S. Redeye is a shoulder-fired guided missile system designed to give troops an effective defence against low-flying aircraft. It was the world's first operational infantry-carried SAM, and development commenced the late 1950s in an effort to provide U.S. infantry units with a man-portable system. The Redeye SAM entered into service in 1966.¹³⁶ The missile is a very simple first generation system guided to its target by passive infra-red homing which limits its use to pursuit engagements, the missiles guidance system being capable of homing in on the heat from the exhaust emissions of aircraft. To be effective the missile must be able to overtake a retreating aircraft within a range of about 3-4

¹³⁴ R. T. Pretty, *op.cit*, P. 446

¹³⁵ Ray Bonds (ed), *op.cit*, P. 193

¹³⁶ R. T. Pretty, *op.cit*, P. 97

kilometres which restricts its use to comparatively low speed targets. The Redeye is only 1219 millimetres long and the complete missile and its launcher weighs 13 kilograms.¹³⁷

V-3-3-7. Stinger Surface-to-Air Missile

The U.S. Stinger Surface-to-Air missile appeared in the early 1980s as a substitute for the General Dynamics FIM-43 Redeye Surface-to-Air missile. It is a shoulder-fired guided missile system designed to give a soldier an effective defence against low-flying aircraft. Advanced propellants were used to ensure Stinger performance levels would be appreciably higher than those of the Redeye despite the Stinger's greater weight. One of the most important improvements incorporated into the Stinger missile is the greater resistance to electronic and other countermeasures.¹³⁸ The operator acquires his target visually in the system's open sight, initiates the missile functions, identifies the target with the Identification Friend or Foe (IFF) subsystem and, launches the missile.¹³⁹ The basic shoulder-launched Stinger provides the U.S.A. and its allies with a capable man-portable SAM system. At the same time, it is reported that the system has been used by terrorists. The Stinger SAM is 1,520 millimetres long and weighs 13.6 kilograms including launcher, making it transportable in a small car. It is also possible to destroy an aircraft flying at an altitude of around 4,800 metres over a range 5,030 metres.¹⁴⁰

¹³⁷ Christopher Chant, *op.cit*, PP. 105-106

¹³⁸ Richard Clutterbuck, *op.cit*, P. 41

¹³⁹ *Ibid*, P. 46

¹⁴⁰ Christopher Chant, *op.cit*, PP. 128-133

V-3-4. Arms Transfer of Missile Weaponry

Since the end of World War II, the Soviet Union had been the world's largest exporter of arms to Third World states. In fact, arms transfers have been a crucial part of Soviet relations with the Third World. Although the Soviet Union had tried to establish close ties with the Third World through a variety of nonmilitary means including economic assistance, trade and political cooperation, it has been unable to sustain its economic aid. Consequently, arms transfers became the primary instrument that enabled the Soviet Union to compete with Western democratic states and the People's Republic of China for influence in the Third World.¹⁴¹ At the same time, Soviet arms transfers were designed to support guerrilla organizations and terrorist groups fighting pro-Western regimes. Although the Soviet Union sometimes provided arms directly to subnational groups such as the Palestine Liberation Organization, the African National Congress and the Southwest Africa People's Organization, the usual procedure was to provide weapons to terrorists through third parties such as Libya, Syria, North Korea and Cuba.¹⁴² The use of intermediaries enabled the Soviet authorities to deny that the Soviet Union supported terrorism. On October 30, 1987, French authorities seized a ship in French waters off the port of Roscoff with 150 tons of arms and ammunition aboard. The huge arms cache

141 Alan Platt, Arms Transfers to the Middle East: European and Other Suppliers, RAND Corporation, N728686, PP. 1-3; Mark N. Kramer, "Soviet Arms Transfer to the Third World", Problems of Communism, September-October 1987, PP. 52-59

142 U.S. Department of Defense, Soviet Military Power 1986, March 1986, PP. 128-129; Pedro Ramet, "The Soviet-Syrian Relationship", Problems of Communism, September-October 1986, P. 36; Facts on File, September 30, 1988

aboard the boat included 20 SA-7 missiles and 120 RPG-7 portable rocket launchers almost all of which had been provided by the Soviet Union to Libya.¹⁴³ The weapons, at least some of which were apparently bound for the PIRA, were claimed by British and French officials to have been supplied by Libya.¹⁴⁴ It is clear that the SAM missiles are made available to terrorists by some governments sponsoring terrorism, including North Korea, Cuba, and particularly Libya. In fact, the SAM missiles found in September 1972 at Rome were supplied to the PFLP by Libya, where massive stocks of modern Russian weapons were stored.¹⁴⁵

Many international terrorist organizations have also obtained possession of modern Western-made SAM missiles through various channels. It is known that the United States have supplied Redeye and Stinger SAM missiles to rebel movements in Afghanistan and Angola as well as to the Contras in Nicaragua to counter Soviet-sponsored subversion.¹⁴⁶ The Nicaraguan government announced, on July 22, 1987, the capture of a Redeye missile that had been parachuted into Chontales province on July 19, 1987. Defense Minister Ortega, criticized the United States for introducing a new missile system into Central America, and said that five U.S.-run air drops into Nicaragua had been

¹⁴³ The Guardian, November 2, 1987; The Independent, November 4, 1987; The Time, November 5, 1987; Facts on File, November 13, 1987, P. 847; Patrick Bishop and Eamonn Mallie, The Provisional IRA, London: Corgi Books, 1987, P. 462

¹⁴⁴ The Independent, November 3, 1987; The Guardian, November 2, 1987; The Observer, November 8, 1987; The Sunday Times, November 8, 1987; The International Herald Tribune, November 18, 1987

¹⁴⁵ Christopher Dobson and Ronald Payne, op.cit, P. 16

¹⁴⁶ Facts on File, May 15, 1987, P. 345; September 25, 1987, P. 695; July 20, 1990, P. 545

intercepted to date in 1987.¹⁴⁷ The United States was believed to have delivered as many as 750 of the shoulder-fired missiles to Afghan rebels since late 1986.¹⁴⁸ The SAM missiles which were provided to the above-mentioned groups appeared on the arms black market and fell into the hands of terrorists.

On May 1, 1987, the Washington Post reported that U.S. lawmakers were seeking a congressional audit into how the Central Intelligence Agency (CIA) had controlled its deliveries of sophisticated SAM missiles to rebel movements in Angola and Afghanistan. The move, in fact, followed a report that some Stinger missiles had been seized from a group of arms-trafficking bandits arrested in Zambia, who had obtained the missiles from Jonas Savimbi's National Union for the Total Independence of Angola(UNITA) by way of Zaire.¹⁴⁹ Senator Dennis DeConcini released declassified sections of a General Accounting Office report on CIA and Defence Department efforts to prevent Stinger from falling into the hands of terrorists. Although the report said safeguards had been improved recently, it only covered the sale of missiles to the U.S. allies and did not deal with those provided covertly to Afghan and Angolan insurgents.¹⁵⁰ With the lack of safeguards on the supply of Stinger missiles, it is obvious that some of the missiles might end up on the black market, where they could be purchased by terrorists seeking to shoot down civil aircraft. It was also reported that an Afghan resistance group allegedly sold 16 of a batch of 32 missiles to Iran for \$1 million.¹⁵¹ On October 9, 1987, U.S.

¹⁴⁷ Facts on File, September 11, P. 666

¹⁴⁸ Facts on File, September 25, 1987, P. 695

¹⁴⁹ Facts on File, May 15, 1987, PP. 344-345

¹⁵⁰ Ibid

¹⁵¹ The Sunday Times, September 20, 1987

Defence Secretary Caspar Weinberger made a passing reference to the possible presence of Stinger missiles in Iranian hands, and the Pentagon confirmed that "equipment recovered aboard the small Iranian craft which we struck is believed to be associated with the Stinger system."¹⁵² With recognition of the very real possibility that the SAMs could fall into the hands of anti-American terrorist organizations, some of which had ties to the Afghan resistance, the U.S. administration, on March 11, 1989, announced that the U.S. was planning to buy back hundreds of sophisticated Stinger surface-to-air missiles that had been supplied to the Afghan rebels in recent years.¹⁵³ However, as no one knows where the missiles are or indeed how many of them are missing, it is unlikely that this plan will be successful.

In addition to U.S.-made Stinger missiles, there is no doubt that British-made Blowpipe missiles are also in the hands of guerrilla and terrorist organizations. Although Claire Sterling claims that the PIRA has possessed sophisticated weapons such as RPG-7 rocket since the early 1970s,¹⁵⁴ the great threat of using SAM missiles caught on in the late 1980s. After the attempted Blowpipe smuggling incident mentioned above, on October 30, 1987, a British newspaper predicted that the PIRA was about to attack civil aviation with SAM missiles.¹⁵⁵ Nearly two weeks later the same newspaper reported that the PIRA was

¹⁵² Facts on File, October 16, 1987, P. 751

¹⁵³ Facts on File, April 21, 1989, P. 277

¹⁵⁴ Claire Sterling, The Terror Network: The Secret War of International Terrorism, London: George Weidenfeld and Nicolson, 1981, P. 152

¹⁵⁵ The Daily Star, December 30, 1987

planning to smuggle SAMs into England for their operation.¹⁵⁶ Early in 1988, British officials, finally, revealed that the PIRA were believed to have obtained such a modern weapon system.¹⁵⁷ A serious incident for the British government occurred on April 21, 1989, when five men including three Ulster loyalists, a South African diplomat, and a U.S. citizen and reputed arms dealer based in Geneva, were arrested in Paris for plotting an illegal arms deal with a Protestant paramilitary group in Northern Ireland. The deal allegedly involved a swap in which the Protestant extremists would turn over parts of a British-made Blowpipe shoulder-fired surface-to-air missile in exchange for South African money and arms.¹⁵⁸ The three loyalists were charged with arms trafficking and conspiracy for the purpose of terrorism. All three belonged to the Ulster Defense Association (UDA) and were also said to be members of the Ulster Resistance Organization (URO), an extremist splinter group that favoured violence against Roman Catholics to preserve Protestant power in Northern Ireland and its union with Great Britain.¹⁵⁹ In addition, it was confirmed that the British-made Blowpipe missiles were also in the hands of Afghan guerrilla groups. On January 15, 1987, the Afghan Defence Ministry showed Western reporters a shoulder-fired Blowpipe surface-to-air missiles which had been captured from the rebels.¹⁶⁰

¹⁵⁶ The Daily Star, January 11, 1988

¹⁵⁷ Patrick Bishop and Eamonn Mallie, *op.cit.*, P. 463

¹⁵⁸ Facts on File, May 12, 1989, P. 332

¹⁵⁹ *Ibid*

¹⁶⁰ Facts on File, January 16, 1987, P. 20

On the whole the suppliers and producers of arms are controlled by government if not actually government-owned. For this purpose, many states introduced the end-user certificate as a means of ensuring that weapons went where they were intended. This mechanism, however, has been found to be inadequate since it can be easily be circumvented by the states which do not use such a system. In this situation, there is no real guarantee that the purchasing states will use imported arms for the ends declared in the contract or in the certificate. Although most arms contracts stipulate that any transfer of weapons to a third party will be subject to the approval of the supplying government, in reality this does not occur. There can be no doubt that the Libyan government is the chief offender in this particular area. The Libyans have received large supply of arms from Soviet bloc states and a great deal of this hardware has found its way into the hand of terrorist organizations.¹⁶¹

It is now clear that Soviet manufactured SAM missile weaponry is no longer the main commodity of the illicit arms dealer. It is known that British-made Blowpipe, Javelin, and U.S.-made Stinger surface-to-air missiles have all been offered for sale illegally over the last couple of years by international arms dealers.¹⁶² On May 5, 1990, the U.S. Federal Bureau of Investigation (FBI) foiled an attempt by agents of Colombian drug cartels to buy 120 Stinger missiles in Florida and smuggle them to Colombia. The Colombians were said to have been willing to pay \$5 million for the missiles, which sold for \$14,000 each on the government weapons market. It was reported that drug cartel leaders had planned to use the Stinger missiles to attack the aircraft of the Colombian

¹⁶¹ William Boyes, "The International Arms Trade and the Terrorists", Contemporary Affairs Briefing, Vol. 1, No. 7, 1981, PP. 2-3

¹⁶² Alan Malcher, "Missile available illegally", Flight International, May 20, 1989, P. 16

President.¹⁶³ According to Alan Malcher, all the arms dealers have been inundated with requests for the Stinger missile which demonstrated its superiority in Afghanistan and many purchasers were willing to pay up to 11 times the manufacturer's price. The arms dealers who were unable to obtain the Stinger missiles had offered several alternatives including Blowpipe, Javelin, and SA-7 missiles.¹⁶⁴ Malcher also revealed that without exception, all of the arms dealers offered an end-user certificate for an additional 2% of the total price of the arms, and delivery to a port of the user's choice. The dealers were not concerned who they sold arms to.¹⁶⁵ It was reported that although many Arab states had been able to obtain Soviet arms, they now intended to obtain Western-made one because they were no longer willing to accept Soviet influence within the Middle East.¹⁶⁶ It is now clear that Palestinian terrorist organizations, which have used missiles to try to shoot down civilian airliners, obtained some of the SAM missiles through the arms black market. As long as adequate finance is available, anyone can purchase sophisticated missile weaponry.

163 Facts on File, July 20, 1990, P. 542

164 Alan Malcher, "Author Goes on "Shopping Spree" in Illicit Arms Market", Armed Forces Journal International, August 1989, P. 40

165 Alan Malcher, "Sophisticated Weapons and their Availability", The Police Journal, October 1989, P. 338

166 Ibid

V-3-5. Preventive and Counter-Measures against Missile Attack

V-3-5-1. Intelligence Gathering

In his classic "Bean Fat" (Art of War) written more than a thousand years ago Sun Tzu said that "Know the enemy and know yourself; in a hundred battles you will never be in peril."¹⁶⁷ This maxim stresses the importance of intelligence gathering. In other words, good intelligence remains the first line of defense against terrorism. It is true that modern technologies clearly aid terrorists in terms of weapons and targets. However technology can also be used against the terrorists. With the help of computers, Western governments can keep track of terrorist organizations and their movements. At the same time, electronic collection methods and signals intelligence give a great possibility to eavesdrop on and intercept terrorist communications, and therefore to better predict terrorists' operations. A good example of intelligence gathering by the use of high technology aerial reconnaissance occurred in September 1984, when the PIRA spent an estimated £1.5 million in the United States on a massive shipment of seven tons of arms. With the help of an informer about a forthcoming shipment of weapons, including rockets, to the PIRA from the United States, the FBI informed British intelligence, which in turn contacted the Irish, and the ship carrying arms was tracked by an U.S. satellite 300 kilometres above the earth. The satellite photographed the transfer of the arms to a trawler. Finally, two Irish navy vessels intercepted the trawler and British security forces arrested the crew.¹⁶⁸ This incident shows that intelligence gathering with the help of high technology can cut off the transfer of missile and other weaponry to terrorists.

¹⁶⁷ Sun Tzu, The Art of War, Translated and an Introduction by Samuel B. Griffith, Oxford: Oxford University Press, 1963, P. 84

¹⁶⁸ The Daily Telegraph, October 16, 1984; The Times, December 12, 1984

V-3-5-2. The Perimeter Guard

For a successful missile attack against aircraft, the firing position has to be located within range of the flightpath. The missiles guidance system is such that the weapon has to be fired within a few degrees of flightpath if the infra-red guidance is to acquire the target. Accordingly, a possible preventive measure would be to prevent the terrorists from getting into a firing position with their missiles. It is a very difficult task to sterilise up to 6 kilometres covering the paths of aircraft as they land and take-off. This measure, in fact, is impossible and at best impracticable.¹⁶⁹ However, security patrolling of the outer areas of airports in times of stringent security conditions might prevent such terrorist attacks. Even in times when no specific threat warning has been received it is within the capacity of most states to monitor those strips of land from which a SAM could be launched and thus minimise the risk. At the same time, these security operations would deter terrorists from spending vital resources on buying SAM's given the limited possibilities for their use.

V-3-5-3. Installation Anti-Missile System

The main possible counter-measure against missile attacks is to install a sophisticated anti-missile system similar to that employed on military aircraft to divert surface-to-air missiles. Immediately after the discovery of 20 SAM-7 missiles in the coaster Eksund, intercepted by the French authorities off the coast of Brittany in November 1987 when bound for the IRA, all British army

¹⁶⁹ Frederick C. Dorey, Aviation Security, London: Granada, 1983, P. 142

helicopters flying in Northern Ireland were fitted with electronic and other decoy systems to confuse the SAM's heat-seeking guidance system. These included the U.S. made Saunders AN/ALG 144. The system, which linked to the Tracor AN/ALE 40 chaff dispenser, works by jamming the missiles' homing radar, and sending infrared flares and chaff to act as a decoy for the heat seeking device.¹⁷⁰ The system is in use with both the American and the Israeli armies, which have been well-pleased with its performance. Until the British realised that the IRA might have the SAMs, the Ministry of Defence hesitated to install such a system because of the high cost, and the decision to do so shows the seriousness of the threat. The response of El Al airliners to the threat of such attack includes the installation of electronic counter-measure equipment similar to that employed on military aircraft to divert surface-to-air missiles.¹⁷¹ However, the problem is that these counter-measures at this stage are not a 100% effective although they could minimise this type of threat. Hence, there is a need to press ahead with the development of counter-measure systems which are completely able to prevent this type of attack against civil aviation.

V-3-6. Closing Remarks

So far, the Western states has been very fortunate in preventing terrorist missile attacks against civil aviation. The effect of missile attacks on civil aviation have been limited. Security forces, with the help of good intelligence,

¹⁷⁰ The Daily Telegraph, January 7, 1988

¹⁷¹ Aryeh Lewis and Meir Kaplan(ed), Terror in the Skies: Aviation Security, Jerusalem, Israel: ISAS, 1990, P. 226; William Alva Crenshaw, Terrorism and the Threat to the Civil Aviation, Ph.D. Dissertation, University of Maimi, 1987, P. 126

have been successful in tracking down and capturing these missiles before they could be used. However, it is not unlikely that there will be attempts at using surface-to-air missile to attack civil aviation in near future. As some targets become more difficult for terrorists to attack, it is not difficult to anticipate that the terrorist will employ counter-measures to try to overcome enhanced security systems as well as a redirecting their efforts towards less secure targets. It can be said that the 1960s and the 1970s were the age of aircraft hijackings, and the 1980s was the age of sabotage bomb attacks in civil aviation history. What next?

V-4. Conclusion

This Chapter has discussed the potential threats against civil aviation existing now and in the future. It clearly shows that terrorists attacks are not the only threat to the safety of air transportation. The shooting down by the Soviet military of a KAL 007 which violated the former Soviet airspace by mistake in 1983 was one of the classical examples. In a sense, the shooting down of straying civilian aircraft may fall in the same category as terrorist attacks. The great fear is that such attacks can result in terrorist counter attacks. For example, approximately 5 months after the shooting down of an Iranian passenger aircraft by U.S. naval forces in 1988, a Middle Eastern terrorist group claimed responsibility for the bombing of Pan Am 103. It was reported that the attack was ordered and financed by Iran to avenge the U.S. shooting down of a Iranian aircraft. Although this claim was dismissed, Iranian connection with the attack cannot be ruled out. This Chapter also reveals that there is a great potential threat of missile attacks by terrorist organisations. With increased aviation security, the possibility of aircraft hijacking and the placing of explosive devices aboard

aircraft by terrorists is becoming more and more difficult. Consequently, it is not difficult to imagine that terrorists will select other softer targets to achieve their aims. Although not many experts have focused on the possibility of missile attack, this form of attack must be seriously considered and the international community must take preventive measures. In order to ultimately achieve the immunity of air transportation to terrorist attack, governments and the civil aviation industry must employ every available method of political statecraft.

CHAPTER VI

CONCLUSION

"... bombs and hijackers still get on civil aircraft with alarming frequency... What's the point finding out what's going to happen, how it's going to happen, where it's going to happen, why and when, if those in security at the sharp end aren't smart enough to catch them? To be honest, we're wasting our time, while others waste lives. It's very disheartening. The public needs to be made aware. There has to be a public outcry, internationally. Only then will something be done. Only if the public stop flying in protest will the airline industry not only listen, but act and put its house in order: really act. Money has to be invested. Not millions, but billions. But it will never happen... We'll totter from one disaster to another. Always the fire brigade response; chasing fires instead of preventing them from starting."¹

"The battle to protect civil aviation passengers and crew can only be won if the liberal democracies have the will and courage to win the broader struggle against the scourge of international terrorism. Our freedom of airways is ultimately dependent on our ability to preserve the freedom of society as a whole."²

VI-1. Contemporary Perspectives on Acts of Violence Against Civil Aviation

VI-1-1. The Changing Nature of Threat

With the vast technological advancement in the field of aviation safety, a remarkable degree of safety and regularity has been achieved. However, during the past three decades, a new type of threat to civil aviation safety has appeared.

¹ Michael Prince, Crash Course: The World of Air Safety, London: Grafton Books, 1990, P. 40

² Paul Wilkinson, "The Lessons of Lockerbie: A Special Report on Aviation Security to mark the first anniversary of the air disaster", Conflict Studies, No. 226, December 1989, P. 29

Civilian aircraft have been hijacked and bombed in flight. Airline facilities including airline offices, terminals, and passengers have suffered from indiscriminate armed attacks.

The problem of acts of violence against civil aviation only appeared on to the international agenda in the late 1960s and early 1970s with the emergence of aircraft hijacking on a large scale as a global phenomenon. The international community has introduced several measures in an effort to prevent such attacks. The governments, which regard themselves to be particularly at high risk from such acts, have developed their own security measures and policies to cope with the problems. Meanwhile, ICAO have also made invaluable efforts to deal with acts of violence against civil aviation. The ICAO's principal achievements are the preparation, adoption and worldwide acceptance of international conventions dealing with problems of air violence: the Tokyo Convention of 1963, the Hague Convention of 1970, and the Montreal Convention of 1971. However, the responses of the international communities in the early stage were not far-sighted. Nearly all of the national and international efforts were focused mainly on the problem of aircraft hijacking. Other acts of violence against civil aviation such as sabotage bomb attack in flight were not seriously considered as future threats. In fact, the nature of the threat to civil aviation changed from one of aircraft hijacking to one of sophisticated sabotage bomb attack in the early 1980s. Although dramatic aircraft hijackings by politically motivated terrorists still occur, such as that of TWA 847 in June 1985, the improved security procedures and counter-measures against aircraft hijacking have caused aviation terrorists to change their tactics.

The emergence of the sophisticated bomb attack against civil aviation was an alarming new development. Such a level of sophistication had never been used against civil aviation before. Although the threat of sabotage bomb attack was

clearly evident by the mid 1980s, there were no signs of efforts by the international community to counter it. In response to the alarming trend toward the total destruction of aircraft in flight, such as the Lockerbie disaster of December 1988, the international community started to initiate its efforts in various ways. One welcome step to tackle sabotage bomb attack was taken when ICAO adopted the Convention on the Marking of Plastic Explosives for the Purpose of Detection at Montreal on March 1, 1991.³ This convention should have a beneficial effect in the long term. However, international responses, in recent years, demonstrated that the international community, once again, reacted to the terrorist threat rather than anticipating it. It is depressing to note that there are thousands of tons of unmarked plastic explosives including Semtex in the hands of terrorist organizations.

With increased airport security, the possibility of placing an explosive device on an aircraft is becoming more and more difficult. Consequently, it is not difficult to anticipate that terrorists are likely to select alternative soft targets to achieve their aim. It can be said that the 1960s and the 1970s were the age of aircraft hijacking, and the 1980s was the age of sabotage bomb attacks in civil aviation history. What comes next? There is little doubt that the potential threat to civil aviation at present and in the near future is missile attack. It should be remembered that missile attack by terrorists is not a new phenomenon. As discussed in Chapter V, there have been more than 20 such attacks since the early 1970s. Although not many experts focused on the possibility of missile attack against civil aviation in the future, this form of attack must be seriously considered and the international community has to take preventive and counter-measures. At the same time, through the analysis in this thesis, it has been

³ ICAO, "Convention on the Marking of Plastic Explosives for the Purpose of Detection", ICAO Doc. 9571

demonstrated that missile attack by terrorist groups is not the only threat to civil aviation. The shooting down of a KAL 007 by the Soviet military in 1983 and an Iranian aeroplane by U.S. naval forces in 1988 heralded yet another threat for the future. In addition, the international community should pay attention to Qantas airliner affair in July 14, 1992. A US navy warship, the USS Cowpens, the same class of Aegis missile cruiser as the USS Vincennes which shot down an Iranian airliner in 1988, threatened to shoot down an Australian airliner with more than 300 passengers over the Pacific.⁴ According to the Qantas spokesman, the pilot was given the warning message "You are being targeted. Leave the area or you will be fired upon."⁵ After a radio call from the Qantas pilot, the FAA resolved the crisis by putting the Qantas flight on a course bypassing the Cowpens which was participating in a military exercise. It was confirmed that the Qantas aircraft was following its predetermined flight path and no fault on the part of the pilot or air traffic controllers was apparent. The US authorities apologised to Australia by saying that the US navy had mistakenly used an international distress frequency, instead of a designated exercise frequency, in trying to contact planes taking part in the exercise and the Qantas flight was in no danger.⁶ This incident clearly shows that the potential threat of shooting down of civilian aircraft still exists and poses a great danger to the safety of civil aviation. The international community should learn a invaluable lesson from this affair and take measures to ensure the incident will not happen again.

⁴ The Guardian, July 15, 1992

⁵ The Independent, July 15, 1992

⁶ The Scotsman, July 15, 1992

VI-1-2. Regional Aspects

Although, statistically, acts of violence directed at the civil aviation industry represent a small percentage of total terrorist incidents, it is clear that acts of violence against civil aviation are not limited by geographical or political boundaries. Aviation terrorism has spread throughout the world, becoming a global epidemic. In 1975, acts of violence involving civil aviation occurred in only 29 countries, but in 1982 such attacks occurred in 48 countries.⁷ It is surprising to note that 117 countries have been involved in such attacks. This statistic shows that although aviation terrorism afflicts some states more than others, the problem is not confined to certain states. When the geographical distribution of the terrorist attacks over time is examined, regional trends suggest a gradual change of terrorist target. At the early stage, most attacks occurred in the Western Hemisphere and Middle East. In recent years, however, attacks against the civil aviation in the Third World states, especially in Asia and Latin America where political violence is most frequently manifest, gradually increased. Between 1985 and 1990, there were 4 aircraft hijackings in Western Europe and 5 in North America. On the contrary, there were 13 aircraft hijackings each in Asia and Latin America. This trend reflects the success of aviation security measures in the West. With increased attention to airport and aviation security and the implementation of anti-terrorism measures by the Western states, terrorists have directed their efforts toward soft targets in Third World where there is no proper aviation security. The international community should learn the valuable lesson from this: that where there is no effective global aviation security, there are aviation terrorists. In this respect, states which newly

⁷ U.S. Department of Transportation, FAA, Worldwide Criminal Acts Involving Civil Aviation: 1975; U.S. Department of Transportation, FAA, Worldwide Significant Criminal Acts Involving Civil Aviation: 1982

acquire aviation terrorist target status should learn from the success achieved by the United States and Israel in designing an effective aviation security system. In spite of the negative reactions from both the aviation industry and the American public, the programme of anti-hijack measures adopted by the U.S. government in 1972 has produced a remarkable result. The number of aircraft hijackings originating in the U.S. shows the value of the new programme. In 1973, the year after its introduction, the total of U.S. aircraft hijackings dramatically dropped from 26 to 2. The FAA estimated that 118 aircraft hijackings and related attacks may have been prevented between 1973 and 1988. At the same time, the comprehensive security measures which Israel has applied to its national airline have made El Al safe from hijacking since the early 1970s. Although the adoption of the entire package of El Al's security measures is impossible, there is no doubt that the international community can benefit from close examination of the Israeli aviation security system. If there is will, nothing is impossible.

Another significant fact about acts of violence has been its political nature. The first aircraft hijacking in civil aviation history was committed by politically motivated terrorists in the midst of a Peruvian domestic power struggle. Most attacks in Eastern Europe after the Cold War were also characterized by their political nature. In addition, long standing terrorist movements in the Middle East are motivated by political causes. For example, the advent of attacks by Palestinians is closely related to the Arab-Israeli conflict. The Palestinian terrorist organizations are motivated by nationalism and their grievance is rooted in history, arising from the settlement of those whom they regard as aliens in their country. It must be noted that many terrorist attacks on civil aviation stem from the various unresolved national and international political uncertainties. It becomes evident that "International terrorism against civil aviation is far more

linked to political aspirations than people suspect".⁸ As political unrest continues around the world, it can be expected that the multi-operations of the civil aviation industry will bear the brunt of terrorist violence as the perpetrators regard them as a attractive targets for their causes. This means that without political negotiation which leads to compromise solutions, the fundamental causes of such attacks cannot be removed.

VI-2. Considerations for the Future

VI-2-1. Far-Sighted Aviation Security

Trends and cycles have been revealed by examining the many faces of aviation terrorism. The deterrent or diversionary effect of tight security programmes have been reflected in a perceptible shift of terrorist attention to easy targets and to other forms of attack. As security measures have been tightened by major civil aviation states, terrorists have turned their attention to the Third World states. Furthermore, as aircraft hijacking has become more difficult, they have adopted a new tactic such as sabotage bombing and missile attacks. However, governments and the civil aviation industry have failed to keep ahead of advancing threats. Both Western governments and the civil aviation industry upgraded their security capabilities to tackle only the known methods of terrorist attacks. They did not adopt new security measures until the inadequacies of outdated systems were revealed by a successful terrorist operation. As Professor Paul Wilkinson observed, "The most important general

⁸ Peter St. John, Air Piracy, Airport Security, and International Terrorism: Winning the War Against Hijackers, Westport, CT: Quorum Books, 1991, P. 189

lesson we must all learn from the recent history of aviation is never again to allow the terrorists to get so far ahead of the world's airport security system",⁹ it is now necessary to look ahead. Instead of reacting to terrorist attacks, "The emphasis of states must change so as to anticipate, preempt, and preclude them".¹⁰ It should be remembered that terrorists are ever vigilant for any opportunity to perpetrate a successful operation. Unless we close every single loophole to terrorists, acts of violence against air transportation will never cease. To achieve this object, all parties involved in civil aviation, therefore, have to be far-sighted, patient planners to keep pace with the changing threats. It cannot be overemphasized that Prevention is better than cure.

VI-2-2. The Need for the Positive Approach by Governments

One of the major obstacles in achieving effective aviation security is that, "Governments are capricious and inconsistent in their approach to this matter".¹¹ This governmental attitude was lamented by Professor Paul Wilkinson:

"Yet perhaps the biggest obstacle of all to a strategy of international aviation security enhancement is the short-term thinking and sheer complacency of many of the politicians and bureaucrats in positions of responsibility in this field. Bureaucrats and officials tend always to be reluctant to admit any major shortcomings in their security systems in case such criticism threatens their own position. If a crisis or failure does occur they will point to the plethora of other agencies involved and blame someone else. Politicians will

⁹ Paul Wilkinson, "Putting Lives First?: the problems of creating an effective international regime for aviation security", Inaugural Lecture, October 22, 1991, University of St. Andrews, P. 14

¹⁰ Peter St. John, *op.cit.*, P. 171

¹¹ *Ibid.*, P. 182

be reluctant to override the advice of their own officials and the views of powerful interests in the aviation industry."¹²

Furthermore, once the public outrage surrounding a particular incident involving terrorist attacks against civil aviation subsides, governments have always drifted into their traditional indolent approach to the matter. Governments hardly ever implement innovative measures that prevent future attacks. When there is a public outcry following an attack, the implementation of security measures usually takes place. However, some governments, having been spared from terrorist attack, have a tendency to regard the upgrading of security as unnecessary simply because they do not perceive the problem in perspective and play down its potential as strategic threat.¹³ Worst of all, some governments have denied their responsibility to respond to terrorist attacks, even when their own national airlines and citizens are directly targeted. This misconception of aviation security has been an obstruction to effective global aviation security and terrorists have been quick to exploit the resulting hiatus. It is depressing to note that lack of political will has failed to set civil aviation security on the international agenda. In fact, this reality has caused the effects of aviation terrorism to extend to political systems. It should be recognised that governments have a duty to protect their airlines which are regarded as a national symbol. Within the international context, airlines and aviation facilities have become symbolic targets of their respective states. Terrorist acts of violence against civil aviation are not intrinsically attacks on aircraft or attempts to disrupt air transport system per se. The objective of terrorist attacks is to

¹² Paul Wilkinson, "Lessons of Lockerbie", op.cit, PP. 11-12

¹³ Christopher Hill, "The political dilemmas for Western governments", in Lawrence Freedman et al(ed), Terrorism and International Order, London: Routledge & Kegan Paul Ltd, 1986, PP. 77-100

destabilize governments, with civil aviation having been selected as a vulnerable target and the means to achieve this end, El Al and TWA have been targeted repeatedly by terrorists harbouring this conception. In the light of this, it should be recognised that aviation security is a basic government responsibility.

In addition to the active application of tight security measures, many experts believe that terrorist attacks against civil aviation can be curtailed by adopting a hardline policy and bringing terrorists to justice. Paul Wilkinson, a strong supporter of hardline policy, advocates "All democratic governments must hold firm to a strict policy of 'no deals with terrorists' and no submission to blackmail. Consistent national policies of minimising terrorists' chances of rewards and maximising the probability of punishment are most likely to stem the flow of terrorist killings in the longer term."¹⁴ There are well-documented instances that softline approach has invited further terrorist attacks. For example, the submission of the Greek government to PFLP terrorists who hijacked an aircraft of Olympic Airways in 1970 and demanded the release of 7 convicted Arab terrorists encouraged ultimately a number of similar occurrences of this kind, and the use of the tactic quickly spread to non-Palestinian terrorists. Hardline policy includes the use of special counter-terrorism units. Some states, including Israel, the United States, the United Kingdom, Germany and South Korea, have formed special anti-terrorist unit for this specific purpose. This approach has been proved successful as a deterrence on several occasions including Entebbe which was a watershed since it marked the first long-distance anti-terrorist strike to rescue hostages and provided hope that similar operations in the future would prove feasible. In addition, terrorists must be brought to justice and prosecuted under the rule of law. For this purpose, IATA proposed

¹⁴ Paul Wilkinson, Terrorism and the Liberal State, London: Macmillan, 1986, P. 300

that "Establishing an international court which would try any captured hijackers or other criminals who have perpetrated acts of unlawful interference and an international detention centre where terrorists may be held while completing their sentence."¹⁵ Although the adoption of the IATA's proposal is unlikely for several reasons, the international community should consider setting up an international court. Concomitant with this, terrorists would not be released under any circumstances and it would be gradually recognised that there is no use seeking to threaten the target state in order to secure the release of terrorists from prison since terrorists would be placed in the custody of the international court.¹⁶ It is very important to note that, as already discussed, a large number of aircraft hijackings were committed to release convicted terrorists and the adoption of an international court is a effective way to prevent such attacks. Above all, through this hardline approach, democratic states make terrorists understand that they cannot in any circumstances achieve their aims by violent attacks against civil aviation whatever their reason may be.

VI-2-3. Active Approach by Civil Aviation Industry

With the increasing number of attacks against civil aviation, alarms were being sounded throughout the civil aviation industry. However, the aviation industry paid them scant heed. In the early 1960s, the problems of aviation terrorism became clear. At that moment, more attention should have been paid to a new and dangerous phenomenon. Statistics show that there were already 59 aircraft hijacking attempts between 1931 and 1961 and 12 sabotage bomb

¹⁵ Rodney Wallis, *Aviation Security*, op.cit, P. 12

¹⁶ Paul Wilkinson, *Lessons of Lockerbie*, op.cit, P. 26

attacks between 1949 and 1961. The civil aviation industry failed to act in this matter. They regarded such attacks as a passing phenomenon. Furthermore, the dangerous and negligent approach to this matter was spreading as Thomas Ashwood pointed out:

"In retrospect, it is fairly understandable why the governments and industry adopted a negligent attitude. Essentially, fugitive and extortion hijackings, which only demanded transportation and/or money, were cheaper to live with than the expense of providing a preventative security system throughout the entire airline structure".¹⁷

Although the costs of aviation security are relatively high, the problem is the fact that many airlines regard the investment of money in aviation security as nonproductive. At the same time, they are reluctant to invest money in aviation security on the unconvincing assumption that to do so would cut into their profits. One aviation security expert described this attitude as follows:

"But most airlines don't want to spend money. How much they spend in comparison to ticketing or marketing is almost zero. They refuse to do it. They think of only how to make more money".¹⁸

In fact, this tendency has caused great concern for the safety of civil aviation. Airline authorities should remember that this dangerous approach will bring total disaster to their airlines and the aviation industry. A high proportion of frequent travellers have shifted in their attitude, now choosing a particular airline for safety reasons rather than comfort, punctuality, efficiency and speed, as in the past. They are extremely unhappy about the airline standards of safety and

¹⁷ Thomas M. Ashwood, "The Airline Response To Terrorism", in Y. Alexander and R. A. Kilmarx(ed), Political Terrorism and Business, New York: Praeger Publishers, 1979, P. 130

¹⁸ Ibid

security and have little confidence in the performance of many air carriers.¹⁹ This was demonstrated during the Gulf War. The travelling public, businessmen and leisure travellers fearful of terrorist activity and mistrusting the will and capability of the aviation authorities to deter terrorist campaigns against civil aviation, were reluctant to fly. The result was a sharp drop in annual world airline traffic in 1991, for the first time in history. According to the Flight International, the civil aviation industry had lost 25 per cent of traffic in January 1991, the month that Gulf War started.²⁰ This drove the aviation industry into financial difficulties. In January and February 1991, the airlines as a whole suffered from a monthly shortfall in revenue of \$1 billion. In particular, airlines should learn a salutary lesson from the bankruptcy case of Pan Am, the most famous name in world aviation from the days of flying boats to the jumbo-jet era. It was reported that the downing of Pan Am Flight 103 by a terrorist bomb over Lockerbie was one of the major blows to Pan Am.²¹ At the same time, the airline industry can learn a valuable lesson from the verdict of the American jury over Pan Am 103, which found the airline Pan Am guilty of wilful misconduct and of being responsible for allowing a terrorist bomb on board its B-747 jet. The jurors also found Alert Management Inc, which ran the aviation security operations at Frankfurt and other airports, and Pan Am World Services, guilty of wilful misconduct. This verdict has opened the road for a damages award against the insurers of Pan Am far in excess of the \$ 75,000 maximum set by international aviation treaties. The families of Lockerbie victims expect an award

¹⁹ Michael Prince, *op.cit.*, P. 68 and 70

²⁰ Flight International, January 29-February 4, 1992

²¹ The Times, December 5, 1991

in compensation totalling more than \$300 million.²² The first of this award occurred on July 22, 1992, with one family receiving an payment of \$9.23 million.²³ The jury's verdict and the first award which shows enormity of the total cost of claims are clear warning to the civil aviation industry as a whole that they face great damages if their security is not tight enough to prevent aviation terrorism. In this respect, all airlines must realize that they have no choice but to have an effective security system for the safety of their own airlines.

VI-2-3. International Efforts on Political Solutions

As Rodney Wallis said: "Conflict and political unrest are inevitably the potential source of attacks against civil aviation",²⁴ many terrorist attacks on civil aviation are connected with the various unresolved national and international political uncertainties. For example, civil aviation has become military a target in the Middle East conflict. In addition, the majority of attacks against civil aviation in Latin America, Eastern Europe, Asia and Africa have also been involved within wider social and political conflict. There is much well-documented evidence to suggest that a large number of terrorist organizations have deliberately chosen civil aviation as a target to bring worldwide public attention to their causes. This has been confirmed by the increasing number of attacks against civil aviation by politically motivated terrorist organizations. In fact, well

²² The Scotsman, July 11, 1992

²³ The Scotsman, July 23, 1992

²⁴ Rodney Wallis, "Aviation Security", Paper for Discussion at St. Andrews' University, October 10, 1991, P. 17

over 50 politically motivated hijacking and sabotage bomb attacks have been recorded since 1980. In this respect, the question of governing aviation terrorism as a whole must be approached from the angle of settling political problems. However, there is no significant sign of progress on this subject. Rodney Wallis observes:

"Terrorism against civil aviation will continue. All the ingredients which exist today and on which terrorism breeds will remain with us for the foreseeable future. The conflicts in the Middle East show no sign of abatement and governments appear not to have the political will to solve this problem. Certainly the solution is outside the scope of airlines, thus the fertile incubators of radical young people will continue to be fuelled by distrust and hatred which has so frequently spilled over into acts of unlawful interference against civil aviation.²⁵

It is extremely important to note that with prudent and skilful negotiations led by such institutions as the United Nations, many of the underlying causes of terrorist attack against civil aviation could be removed. For example, the settlement of the Palestinian problem would remove many of the causes and thereby enhance the safety of civil aviation. Although rejectionist groups such as the Abu Nidal Organization might attempt to run their own courses of bitterness, an independent Palestinian State would help to marginalize the extremist groups still determined to wage terrorism. One writer advocates this approach as follows:

"It is significant that between 1968 and 1988 it was one unresolved political issue in the Middle East that dominated the field of hijacking. That issue is the question of Palestine. The most fearsome innovators in air hijacking have all come from the ranks of the Palestinian National movement. Between 1968 and 1974 it was George Habash and Wadi Haddad. Between 1974 and

²⁵ Rodney Wallis, "Prevention of Aviation Terrorism: The Airlines' Point of View", in Aviation Security: How to safeguard International Air Transport? Proceedings of a Conference Held on January 22-23, 1987 at the Peace Palace, The Hague, P. 94

1983 it was Carlos and the PFLP and its allies in the Japanese Red Army and the Baader-Meinhof. After 1983 Abu Nidal and the Islamic fundamentalists dominated. It is tempting to suggest that if a negotiated settlement of the Palestinian problem were to come about, that cause of much international hijacking might be removed."²⁶

This approach does not necessarily mean to imply capitulation to terrorists or even concession and accommodation. The method of global political negotiation should be explored to help the tragic divisions of ethnic, religious and ideological conflict in all their forms, including aviation terrorism. For an effective reduction in the scale of aviation terrorism to be achieved, the international community must make progress in negotiations and diplomacy to achieve resolution of the key political conflicts in the international system.

VI-2-4. The Need for Shared Responsibility: Aviation Security in the Third World States

With the upgrading of civil aviation security by the major Western states, terrorists have exploited the weak links in the international aviation network. The UTA disaster in September 1989 demonstrated that the fatal weakness of aviation security in the Third World states would break the concept of global aviation security, and terrorist organisations have exploited that weakness by using down-line airports in the Third World to attack Western airlines away from their main base of operations. In recent years, some aviation security experts have expressed a great concern over airport security in Third World states which offer easy access to terrorists. A large number of the airports in the Third World states including Africa and Asia have no basic security measures whatsoever. Many airports in these regions have no perimeter fencing, no

²⁶ Peter St. John, op.cit, PP. 41-42

security for airplanes, and no screening procedures for passengers. Although the weakness of aviation security poses major problems for the safety of air transportation, there are no signs of improvement.

The major difficulty with regard to the introduction of standard security measures appears to be the expense involved for the less developed states which have a serious problem of poverty and external liabilities. Although the governments in poor states recognise the serious threat of aviation terrorism, the lack of resources prevent priority being given to aviation security. They simply cannot afford the outlay required to provide themselves with national aviation security systems.

What is to be done to eradicate such weak links? Rodney Wallis concluded that "There is perhaps a need for shared responsibility - shared between the governments of those airlines serving Third World airports and those with the obligation devolving from the Tokyo, The Hague and Montreal Conventions."²⁷ International organizations such as ICAO and IATA have been active in the establishment of a new mechanism for financial, technical and material assistance to their member states for aviation security. Under the coordination of ICAO, the voluntary bilateral assistance programme for aviation security was established in 1986, through this programme a significant number of member states have benefited from assistance provided by donor states. Moreover, the ICAO Technical Assistance Programme, funded under the United Nations Development Programme(UNDP), has for many years encouraged developing states to include aviation security in their development programmes. The most recent achievement has been in the Asia and Pacific region where a \$1.2 million regional project was devoted to aviation security. Under this project, aviation

²⁷ Rodney Wallis, "Aviation Security", op.cit, PP. 19-20

security experts visited over 100 airports in 22 states, advising on needed improvements. At the same time, a considerable number of security personnel were awarded aviation security training fellowships.²⁸ In addition, in 1984, IATA established an aviation security training programme operated jointly with International Aeradio(IAL) to assist in providing adequately trained security personnel for member airlines of developing states.²⁹ However, the need of developing states for assistance in aviation security requires that more resources become available for this purpose. Consequently, this type of programme should be continued and expanded as a long term goal. In this respect, the international community must take action such as the introduction of international aviation security funds which would provide grants and soft loans for investment in airport security equipment and airport staff training programmes in the developing states.³⁰ The international community have to remember that weak links in aviation security can not be prevented simply by adopting new technologies and methods in a few major civil aviation states. If the major civil aviation governments have the intention to protect their airlines and passengers from aviation terrorism, it should be borne in mind that airports in poor states must first be made safer.

28 William R. Fromme, "ICAO's Role in the Field of Aviation Security", Flight Safety Foundation, 1990, PP. 92-93

29 Trevor Chaseling, "Aviation Security and Airlines", in Y. Alexander and E. Sochor(ed), Aerial Piracy and Aviation Security, Dordrecht: Martinus Nijhoff Publishers, 1990, P. 23

30 Paul Wilkinson, Inaugural Lecture, op.cit, P. 21

VI-2-5. Education on Terrorism

Aviation terrorism is a significant problem that affects people all over the world. Without a fundamental understanding of terrorism by the public, it is virtually impossible to cure such a phenomenon. To achieve this objective, it is necessary to launch a programme of education on this matter. This programme should underscore the link between basic human rights, peaceful resolution of international conflicts, and the impracticality of terrorism as a strategy to coerce the attitude and behaviour of others. The goal of this programme is to make the public better aware of the enormity of terrorism as both a direct violation and as a long term threat to human rights and thus better able to understand the need to deal with it. Within high school classes in social studies and history, for instance, governments could encourage the investigation, analysis, and discussion of relationship between the norms of general human rights and terrorism. Moreover, Jordan J. Paust suggested that "Related educational programmes and concerns can be developed for other levels, including more general but important cooperative and individual-oriented learning in elementary and preschool process."³¹ At national level, these educational efforts should be sponsored by governments with the help of educational groups and institutions as well as law enforcement agencies and media groups. At international level, several international organizations, such as the United Nations Educational, Scientific and Cultural Organization(UNESCO), United Nations Institute for Training and Research(UNITAR), and the International Committee of the Red Cross with its headquarters staff and national societies, should be engaged as the

³¹ Jordan J. Paust, "Nonprotected Persons or Things", in Alona E. Evans and John F. Murphy(ed), Legal Aspects of International Terrorism, Lexington: Lexington Books, P. 360

coordinative, promotional, and advisory services directed towards the establishment of educational programmes.³²

As Jordan J. Paust observed, "Education is critical in waging an effective ideological war against terrorists",³³ governments should act in stimulating extensive and effective educational programmes concerned with the prevention of terrorism and the protection of human rights. This measure is clearly not a straight forward process, but such an effort would provide a useful guideline for the broader public understanding of such threats, and the necessity to combat terrorism. In addition, the formation of a moral consensus and the broadening of the working foundation of law will discredit and discourage terrorist activities.

VI-3. Concluding Remarks

It is generally accepted that international terrorism is unlikely to stop until its root causes are dealt with. However, the root causes of terrorism may not be removed for a long time. There are, across the world, persistent conflicting political, social and economic claims. In addition, there will perhaps always be frustrated and unstable individuals, delighted to devise an ideological or theological excuse to commit acts of violence. Ending the root causes of acts of violence on one side could well aggravate the root cause on the other. Moreover, for some states, international terrorism has become a useful alternative way for achieving their political aims. It might be impossible to eradicate acts of violence by resolving political grievances, particularly in the short term. However, there is no doubt that many terrorist acts of violence

³² Jordan J. Paust, "Private Measures of Sanctions", in *Ibid*, PP. 589-590

³³ *Ibid*, P. 606

against civil aviation can be deterred or prevented if there is national and international will. The problem is that while each state knows what is best for itself, there is no political consensus on what is best for all. The international community and the civil aviation industry talk of war against aviation terrorism, they talk of effective security measures for civil aviation safety, they talk, talk, talk, and never act.

Appendix I*

Protocol relating to an amendment to the Convention on International Civil Aviation

[Article 3 bis]

MONTREAL
10 May 1984

THE ASSEMBLY OF THE INTERNATIONAL CIVIL AVIATION ORGANIZATION

HAVING MET in its Twenty-fifth Session(Extraordinary) at Montreal on 10 May 1984,

HAVING NOTED that international civil aviation can greatly help to create and preserve friendship and understanding among the nations and peoples of the world, yet its abuse can become a threat to general security,

HAVING NOTED that it is desirable to avoid friction and promote that cooperation between nations and peoples upon which the peace of the world depends,

HAVING NOTED that it is necessary that international civil aviation may be developed in a safe and orderly manner,

HAVING NOTED that in the Convention on International Civil Aviation done at Chicago on the seventh day of December 1944 the contracting States

- recognize that every State has complete and exclusive sovereignty over the airspace above its territory,
- undertake, when issuing regulations for their state aircraft, that they will have due regard for the safety of navigation of civil aircraft, and
- agree not to use civil aviation for any purpose inconsistent with the aims of the Convention,

HAVING NOTED the resolve of the contracting States to take appropriate measures designed to prevent the violation of other States' airspace and the use of civil aviation purposes inconsistent with the aims of the Convention and to enhance further the safety of international civil aviation,

HAVING NOTED the general desire of contracting States to reaffirm the principle of non-use of weapons against civil aircraft in flight,

1. DECIDES that it is desirable therefore to amend the Convention on International Civil Aviation done at Chicago on the seventh day of December 1944,
2. APPROVES, in accordance with the provision of Article 94(a) of the Convention aforesaid, the following proposed amendment to the said Convention:

Insert, after Article 3, a new Article 3 bis:

"Article 3 bis

- (a) The contracting States recognize that every State must refrain from resorting to the use of weapons against civil aircraft in flight and that, in case of interception, the lives of persons on board and the safety of aircraft must not be endangered. This provision shall not be interpreted as modifying in any way the rights and obligations of States set forth in the Charter of the United Nations.
 - (b) The contracting States recognize that every State, in the exercise of its sovereignty, is entitled to require the landing at some designated airport of a civil aircraft flying above its territory without authority or if there are reasonable grounds to conclude that it is being used for any purpose inconsistent with the aims of this Convention; it may also give such aircraft any other instructions to put an end to such violations. For this purpose, the contracting States may resort to any appropriate means consistent with relevant rules of international law, including the relevant provisions of this Convention, specifically paragraph (a) of this Article. Each contracting States agrees to publish its regulations in force regarding the interception of civil aircraft.
 - (c) Every civil aircraft shall comply with an order given in conformity with paragraph (b) of this Article. To this end each contracting State shall establish all necessary provisions in its national laws or regulations to make such compliance mandatory for any civil aircraft registered in that State or operated by a person having his principal place of business or permanent residence in that State. Each contracting State shall make any violation of such applicable laws or regulations punishable by severe penalties and shall submit the case to its competent authorities in accordance with its laws or regulations.
 - (d) Each contracting State shall take appropriate measures to prohibit the deliberate use of any civil aircraft registered in that State or operated by an operator who has his principal place of business or permanent residence in that State for any purpose inconsistent with the aims of this Convention. This provision shall not affect paragraph (a) or derogate from paragraphs (b) and (c) of this Article."
3. SPECIFIES, pursuant to the provision of the said Article 94 (a) of the said Convention, one hundred and two as the number of contracting State upon whose ratification the proposed amendment aforesaid shall come into force, and
4. REVOLVES that the Secretary General of the International Civil Aviation Organization draw up a Protocol, in the English, French, Russian and Spanish languages, each of which shall be of equal authenticity, embodying the proposed amendment above-mentioned and the matter hereafter appearing:
- a) The Protocol shall be signed by the President of the Assembly and its Secretary General.
 - b) The Protocol shall be open to ratification by any State which has ratified or adhered to the said Convention on International Civil Aviation.
 - c) The instruments of ratification shall be deposited with the International Civil Aviation Organization.
 - d) The Protocol shall come into force in respect of the States which have ratified it on the date on which the one hundred and second instrument of ratification is so deposited.
 - e) The Secretary General shall immediately notify all contracting States of the date of deposit of each ratification of the Protocol.
 - f) The Secretary General shall notify all States parties to the said Convention of the date on which the Protocol comes into force.

- g) With respect to any contracting State ratifying the Protocol after the date aforesaid, the protocol shall come into force upon deposit of its instrument of ratification with the International Civil Aviation Organization.

CONSEQUENTLY, pursuant to the aforesaid action of the Assembly,

This Protocol has been drawn up by the Secretary General of the Organization.

IN WITNESS WHEREOF, the President and the Secretary General of the aforesaid Twenty-fifth Session(Extraordinary) of the Assembly of the International Civil Aviation Organization, being authorized thereto by the Assembly, sign this Protocol.

DONE at Montreal on the 10th day of May of the year one thousand nine hundred and eighty-four, in a single document in the English, French, Russian and Spanish languages, each text being equally authentic. This Protocol shall remain deposited in the archives of the International Civil Organization, and certified copies thereof shall be transmitted by the Secretary General of the Organization to all States parties to the Convention on International Civil Aviation done at Chicago on the seventh day of December 1944.

* Source: International Legal Materials, Vol. 23, 1984

Appendix II **

Convention on the Marking of Plastic Explosives for the Purpose of Detection

MONTREAL
1 March 1991

THE STATES PARTIES TO THIS CONVENTION,

CONSCIOUS of the implication of acts of terrorism for international security;

EXPRESSING deep concern regarding terrorist acts aimed at destruction of aircraft, other means of transportation and other targets;

CONCERNED that plastic explosives have been used for such terrorist acts;

CONSIDERING that the marking of such explosives for the purpose of detection would contribute significantly to the prevention of such unlawful acts;

RECOGNIZING that for the purpose of deterring such unlawful acts there is an urgent need for an international instrument obliging States to adopt appropriate measures to ensure that plastic explosives are duly marked;

CONSIDERING United Nations Security Council Resolution 635 of 14 June 1989, and United Nations General Assembly Resolution 44/29 of 4 December 1989 urging the International Civil Aviation Organization to intensify its work on devising an international regime for the marking of plastic or sheet explosives for the purpose of detection;

BEARING IN MIND Resolution A27-8 adopted unanimously by the 27th Session of the Assembly of the International Civil Aviation Organization which endorsed with the highest and overriding priority the preparation of a new international instrument regarding the marking of plastic or sheet explosives for detection;

NOTING with satisfaction the role by the Council of the International Civil Aviation Organization in the preparation of the Convention as well as its willingness to assume functions related to its implementation;

HAVE AGREED AS FOLLOWS:

Article I

For the purpose of this Convention:

1. "Explosives" mean explosive products, commonly known as "Plastic explosives", including explosives in flexible or elastic sheet form, as described in the Technical Annex to this Convention.
2. "Detection agent" means a substance as described in the Technical Annex to this Convention which is introduced into an explosive to render it detectable.

3. "Marking means introducing into an explosive a detection agent in accordance with the Technical Annex to this Convention.
4. "Manufacture" means any process, including reprocessing, that produces explosives.
5. "Duly authorized military devices" include, but are not restricted to, shells, bombs, projectiles, mines, missiles, rockets, shaped charges, grenades and perforators manufactured exclusively for military or police purpose according to the laws and regulations of the State Party concerned.
6. "Producer State" means any State in whose territory explosives are manufactured.

Article II

Each State Party shall take the necessary and effective measures to prohibit and prevent the manufacture in its territory of unmarked explosives.

Article III

1. Each State Party shall take necessary and effective measures to prohibit and prevent the movement into or out of its territory of unmarked explosives.

2. The preceding paragraph shall not apply in respect of movements for purpose not inconsistent with the objectives of this Convention, by authorities of a State Party performing military or police functions, of unmarked explosives under the control of that State Party in accordance with paragraph 1 of Article IV.

Article IV

1. Each State Party shall take the necessary measures to exercise strict and effective control over the possession and transfer of possession of unmarked explosives which have been manufactured in or brought into its territory prior to the entry into force of this Convention in respect of that State, so as to prevent their diversion or use for purposes with the objectives of this Convention.

2. Each State Party shall take necessary measures to ensure that all stocks of those explosives referred to in paragraph 1 of this Article not held by its authorities performing military or police functions are destroyed or consumed for purposes not inconsistent with the objectives of this Convention, marked or rendered permanently ineffective, within a period of three years from entry into force of this Convention in respect of that State.

3. Each State Party shall take necessary measures to ensure that all stocks of those explosives referred to in paragraph 1 of this Article held by its authorities performing military or police functions and that are not incorporated as an integral part of duly authorized military devices are not consumed for the purposes not inconsistent with the objectives of this Convention, marked or rendered permanently ineffective, within a period of fifteen years from the entry into force of this Convention in respect of that State.

4. Each State Party shall take necessary measures to ensure the destruction, as soon as possible, in its territory of unmarked explosives which may be discovered therein and which are not referred to in the preceding paragraph of this Article, other than stocks of unmarked explosives held by its authorities performing military or police functions and incorporated as an integral part of duly authorized military devices at the date of the entry into force of this Convention in respect of that State.

5. Each State Party shall take necessary measures to exercise strict and effective control over the possession and transfer of possession of the explosives referred to in paragraph II of Part 1 of the Technical Annex to this Convention so as to prevent their diversion or use for purposes inconsistent with the objectives of this Convention.

6. Each State Party shall take necessary measures to ensure the destruction, as soon as possible, in its territory of unmarked explosives manufactured since the coming into force of this Convention in respect of that State that are not incorporated as specified in paragraph II d) of Part 1 of the Technical Annex to this Convention and of unmarked explosives which no longer fall within the scope of any other sub-paragraphs of the said paragraph II.

Article V

1. There is established by this Convention an International Explosives Technical Commission(hereafter referred to as "the Commission") consisting not less than fifteen nor more than nineteen members appointed by the Council of the International Civil Aviation Organization(hereafter to as "the Council") from among persons nominated by States Parties to this Convention.

2. The members of the Commission shall be experts having direct and substantial experience in matters relating to the manufacture or detection of, or research in, explosives.

3. Members of the Commission shall serve for a period of three years and shall be eligible for re-appointment.

4. Sessions of the Commission shall be convened, at least once a year at the Headquarters of the International Civil Aviation Organization, or at such places and times as may be directed or approved by the Council.

5. The Commission shall adopt its rules of procedure, subject to the approval of the Council.

Article VI

1. The Commission shall evaluate technical developments relating to the manufacture, marking and detection of explosives.

2. The Commission, through the Council, shall report its findings to the States Parties and international organizations concerned.

3. Whenever necessary, the Commission shall take make recommendations to the Council for amendments to the Technical Annex to this Convention. the Commission shall endeavour to take its decisions on such recommendations by consensus. In the absence of consensus the Commission shall take such decisions by a two-thirds majority vote of its members.

4. The Council may, on the recommendations of the Commission, propose to States Parties amendments to the Technical Annex to this Convention.

Article VII

1. Any State Party, within ninety days from the date of notification of a proposed amendment to the Technical Annex to this Convention, transmit to the Council its comments. The Council shall communicate these comments to the Commission as soon as possible for its consideration. The Council shall invite any State Party which comments on or objects to the proposed amendment to consult the Commission.

2. The Commission shall consider the views of States Parties made pursuant to the preceding paragraph and report to the Council. The Council, after consideration of the Commission's report, and taking into account the nature of the amendment and the comments of States Parties, including producer States, may propose the amendment to all States Parties for adoption.

3. If a proposed amendment has not been objected to by five or more States Parties by means of written notification to the Council within ninety days from the date of notification of the amendment by the Council, it shall be deemed to have been adopted, and shall enter into force one hundred and eighty days thereafter or after such other period as specified in the proposed amendment for States Parties not having expressly objected thereto.

4. States Parties having expressly objected to the proposed amendment may, subsequently, by means of deposit of an instrument of acceptance or approval, express their consent to be bound by the provisions of the amendment.

5. If five or more States Parties have objected to the proposed amendment, the Council shall refer it to the Commission for further consideration.

6. If the proposed amendment has not been adopted in accordance with paragraph 3 of this Article, the Council may also convene a conference of all States Parties.

Article VIII

1. States Parties shall, if possible, transmit to the Council information that would assist the Commission in the discharge of its functions under paragraph 1 of Article VI.

2. States Parties shall keep the Council informed of measures they have taken to implement the provisions of this Convention. The Council shall communicate such information to all States Parties and international organization concerned.

Article IX

The Council shall, in co-operation with States Parties and international organizations concerned, take appropriate measures to facilitate the implementation of this Convention, including the provision of technical assistance and measures for the exchange of information relating to technical developments in the marking and detection of explosives.

Article X

The Technical Annex to this Convention shall form an integral part of this Convention.

Article XI

1. Any dispute between two or more States Parties concerning the interpretation or application of this Convention which cannot be settled through negotiation shall, at the request of one of them, be submitted to arbitration. If within six months from the date of the request for arbitration the Parties are unable to agree on the organization of the arbitration, any one of those Parties may refer the dispute to the International Court of Justice by request in conformity with the Statute of the Court.

2. Each State Party may, at the same time of signature, ratification, acceptance or approval of this Convention or accession thereto, declare that it does not consider itself bound by the preceding paragraph. The other States Parties shall not be bound by the preceding paragraph with respect to any States Party having made such a reservation.

3. Any State Party having made a reservation in accordance with the preceding paragraph may at any time withdraw this reservation by notification to the Depositary.

Article XII

Except as provided in Article XI no reservation may be made to this Convention.

Article XIII

1. This Convention shall be open for signature in Montreal on 1 March 1991 by States participating in the International Conference on Air Law held at Montreal from 12 February to 1 March 1991. After 1 March 1991 the Convention shall be open to all States for signature at the headquarters of the International Civil Aviation Organization in Montreal until it enters into force in accordance with paragraph 3 of this Article. Any State which does not sign this Convention may accede to it at any time.

2. This Convention shall be subject to ratification, acceptance, approval or accession by States. Instruments of ratification, acceptance, approval or accession shall be deposited with the International Civil Aviation Organization, which is hereby designated the Depositary. When depositing its instrument of ratification, acceptance, approval or accession, each State shall declare whether or not it is a producer State.

3. This Convention shall enter into force on the sixtieth day following the date of deposit of the thirty-fifth instrument of ratification, acceptance, approval or accession with the Depositary, provided that no fewer than five such States have declared pursuant to paragraph 2 of this Article that they are producer States. Should thirty-five such instruments be deposited prior to the deposit of their instruments by five producer States, this Convention shall enter into force on the sixtieth day following the date of deposit of the instrument of ratification, acceptance, approval or accession of the fifth producer State.

4. For other States, this Convention shall enter into force sixty days following the date of deposit of their instruments of ratification, acceptance, approval or accession.

Article XIV

The Depositary shall promptly notify all signatories and States Parties of:

1. each signature of this Convention and date thereof;
2. each deposit of an instrument of ratification, acceptance, approval or accession and date thereof, giving special reference to whether the State has identified itself as a producer State;
3. the date of entry into force of this Convention;
4. the date entry into force of any amendment to this Convention or its Technical Annex;
5. any denunciation made under Article XV; and
6. any declaration made under paragraph 2 of Article XI.

Article XV

1. Any State Party may denounce this Convention by written notification to the Depositary.
2. Denunciation shall take effect one hundred and eighty days following the date on which notification is received by the Depositary.

IN WITNESS WHEREOF the undersigned Plenipotentiaries, being duly authorized thereto by their Governments, have signed this Convention

DONE at Montreal, this first day of March, one thousand nine hundred and ninety-one, in one original, drawn up in five authentic texts in the English, French, Russian, Spanish and Arabic languages.

TECHNICAL ANNEX

PART 1: DESCRIPTION OF EXPLOSIVES

I. The explosives referred to in paragraph 1 of Article I of this Convention are those that:

- a) are formulated with one or more high explosives which in their pure form have a vapour pressure less than 10^{-4} Pa at a temperature of 25°C;
- b) are formulated with a binder material; and
- c) are, as a mixture, malleable or flexible at normal room temperature.

II. The following explosives, even though meeting the description of explosives in paragraph I of this Part, shall not be considered to be explosives as long as they continue to be held or used for the purposes specified below or remain incorporated as there specified, namely those explosives that:

- a) are manufactured, or held, in limited quantities solely for use in duly authorized research, development or testing of new or modified explosives;
- b) are manufactured, or held, in limited quantities solely for use in duly authorized training in explosives detection and / or development or testing of explosives detection equipment;
- c) are manufactured, or held, in limited quantities solely for duly authorized forensic science purpose; or
- d) are destined to be and are incorporated as an integral part of duly authorized military devices in the territory of the producer State within three years after the coming into force of this Convention in respect of that State. Such devices produced in this period of three years shall be deemed to be duly authorized military devices within paragraph 4 of Article IV of this Convention.

III. In this Part:

"duly authorized" in paragraph II a), b) and c) means permitted according to the laws and regulations of the State Party concerned; and

"high explosives" include but not restricted to cyclotetramethylenetetranitramine(HMX), pentaerythritol tetranitrate(PETN) and cyclotrimethylenetrinitramine(RDX).

PART 2: DETECTION AGENTS

A detection agent is any one of those substances set out in the following Table. Detection agents described in this Table are intended to be used to enhance the detectability of explosives by vapour detection means. In each case, the introduction of a detection agent into an explosive shall be done in such a manner as to achieve homogeneous distribution in the finished product. The minimum concentration of a detection agent in the finished product at the time of manufacture shall be as shown in the said Table.

Table

Name of detection agent	Molecular formula	Molecular weight	Minimum concentration
Ethylene glycol dinitrate(EGDN)	$C_2H_4(NO_3)_2$	152	0.2% by mass
2,3-Dimethyl-2,3-dinitrobutane(DMNB)	$C_6H_{12}(NO_2)_2$	176	0.1% by mass
para-Mononitrotoluene(p-MNT)	$C_7H_7NO_2$	137	0.5% by mass
ortho-Mononitrotoluene(o-MNT)	$C_7H_7NO_2$	137	0.5% by mass

Any explosive which, as a result of its normal formulation, contains any of the designated detection agents at or above the required minimum concentration level shall be deemed to be marked.

**Source: ICAO Doc 9571

Appendix III***

International Standards and Recommended Practices: Security-Safeguarding International Civil Aviation Against Acts of Unlawful Interference-Annex 17 To The Convention On International Civil Aviation

Forth Edition-October 1989

Chapter 1. Definitions

Air Side. The movement area of an airport, adjacent terrain and buildings or portions thereof, access to which is controlled.

Security. A combination of measures and human and material resources intended to safeguard international civil aviation against acts of unlawful interference.

Security Control. A means by which the introduction of weapons, explosives or articles likely to be utilized to commit an act of unlawful interference can be prevented.

Security Programme. Measures adopted to safeguard international civil aviation against acts of unlawful interference.

Chapter 2. General

2.1 Aims and objectives

2.1.1 The aim of aviation security shall be to safeguard international civil aviation operations against acts of unlawful interference.

2.1.2 Safety of passengers, crew, ground personnel and the general public shall be the primary objective of each Contracting State in all matters related to safeguarding against acts of unlawful interference with international civil aviation.

2.1.3 Each Contracting State shall establish an organization, develop plans and implement procedures, which together provide a standardized level of security for the operation of international flights in normal operating conditions and which are capable of rapid expansion to meet any increased security threat.

2.2 Security and facilitation

2.2.1 **Recommendation.** Each Contracting State should whenever possible arrange for the security measures and procedures to cause a minimum of interference with, or delay to the activities of, international civil aviation.

Note.-Guidance material on achieving international civil aviation security objectives through application of the Standards and Recommended Practices in the following chapters is to be found in the Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference(Doc 8973)

Chapter 3. Organization

3.1 National organization

3.1.1 Each Contracting State shall establish a national civil aviation security programme.

3.1.2 Each Contracting State shall ensure that the objective of their national aviation security programme shall be to protect the safety, regularity and efficiency of international civil aviation by providing, through regulations, practices and procedures, safeguards against acts of unlawful interference.

3.1.3 Each Contracting State shall designate an appropriate authority within its administration to be responsible for the development, implementation and maintenance of the national civil aviation security programme.

3.1.4 Each Contracting State shall keep under constant review the level of threat within its territory taking into account the international situation and adjust relevant elements of its national civil aviation security programme accordingly.

3.1.5 Each Contracting State shall require the appropriate authority to establish means of co-ordinating activities between the departments, agencies and other organizations of the State concerned with or responsible for various aspects of the national civil aviation security programme.

3.1.6 Each Contracting State shall require the appropriate authority to define and allocate the tasks for implementation of the national civil aviation security programme as between agencies of the State, airport administrations, operators and others concerned.

3.1.7 Each Contracting State shall ensure the establishment of an airport security programme, adequate to the needs of international traffic, for each airport serving international civil aviation.

3.1.8 Each Contracting State shall arrange for an authority at each airport serving international civil aviation to be responsible for co-ordinating the implementation of security measures.

3.1.9 Each Contracting State shall arrange for the establishment of airport security committees to advise on the development and co-ordination of security measures and procedures at each airport serving international civil aviation.

3.1.10 **Recommendation.** Each Contracting State should ensure that arrangements are made for the investigation of suspected sabotage devices or other potential hazards at airports serving international civil aviation and for their disposal.

3.1.11 Each Contracting State shall ensure that duly authorized and suitably trained officers are readily available for deployment at their airports serving international civil aviation to assist in dealing with suspected, or actual, cases of unlawful interference with international civil aviation

3.1.12 Each Contracting State shall ensure that the appropriate authority arranges for the supporting facilities required by the security services at each airport serving international civil aviation.

3.1.13 Each Contracting State shall ensure that contingency plans are developed and resources made available to safeguard airports and ground facilities used in international civil aviation, against acts of unlawful interference.

3.1.14 Each Contracting State shall require the appropriate authority to ensure the development and implementation of training programmes to ensure the effectiveness of its national civil aviation security programme.

3.1.15 Each Contracting State shall require operators providing service from that State to adopt a security programme and to apply it in proportion to the threat to international civil aviation and its facilities as known to the State.

3.1.16 **Recommendation.** Each Contracting State should promote whenever possible research and development of new security equipment which will better satisfy international civil aviation security objectives.

3.2 International co-operation

3.2.1 Each Contracting State shall co-operate with other States in order to adapt their respective national civil aviation security programmes as necessary.

3.2.1.1 **Recommendation.** Each Contracting State should include in its bilateral agreements on air transport a clause related to aviation security.

3.2.2 Each Contracting State shall ensure that requests from other States for special security measures in respect of specific flights, as far as may be practicable, are met.

3.2.3 Contracting States shall, as necessary, co-operate with each other in the development and exchange of information concerning training programmes.

3.2.4 **Recommendation.** Each Contracting State should co-operate with other States in the field of research and development of new security equipment which will better satisfy international civil aviation security objectives.

Chapter 4. Preventive Security Measures

4.1 General objectives of the measures

4.1.1 Each Contracting State shall establish measures to prevent weapons, explosives or any other dangerous devices which may be used to commit an act of unlawful interference, the carriage or bearing of which is not authorized, from being introduced, by any means whatsoever, on board an aircraft engaged in international civil aviation.

Note.-In applying this Standard, special attention must be paid to the threat posed by explosive devices concealed in, or using electric or battery-operated items carried as hand baggage and/or in checked baggage. Guidance on this matter is to be found in the Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference(Doc 8973).

4.1.2 **Recommendation.** Contracting States should ensure that the carriage of weapons on board aircraft, by law enforcement officers and other authorized persons, acting in the performance of their duties, requires special authorization in accordance with the laws of the States involved.

4.1.2.1 **Recommendation.** Contracting States should ensure that the carriage of weapons in other cases is allowed only when an authorized and only qualified person has determined that they are not loaded, if applicable, and then only if stowed in a place inaccessible to any person during flight time.

4.1.2.2 **Recommendation.** Contracting States should ensure that the pilot-in-command is notified as to the number of armed persons and their seat location.

4.1.3 **Recommendation.** Each Contracting State should ensure that pre-flight checks of aircraft assigned to international flights include measures to discover weapons, explosives and sabotage or other dangerous devices which may have been placed on board.

4.1.4 Each Contracting State shall establish procedures, which include notification to the operator, for inspecting aircraft, when a well-founded suspicion exists that the aircraft may be the object of an act of unlawful interferences, for concealed weapons, explosives or other dangerous devices.

4.1.5 Each Contracting State shall establish measures to safeguard aircraft when a well-founded suspicion exists that the aircraft may be attacked while on the ground and to provide as much prior notification as possible of the arrival of such aircraft to airport authorities.

4.1.6 Each Contracting State shall arrange for surveys and inspections of security measures.

4.2 Measures relating to passengers and their cabin baggage

4.2.1 Each Contracting State shall ensure that adequate measures are taken to control transfer and transit passengers and their cabin baggage to prevent unauthorized articles from being taken on board aircraft engaged in international civil aviation operations.

4.2.2 Each Contracting State shall ensure that there is no possibility of mixing or contact between passengers subjected to such control after the security screening points at airports serving international civil aviation have been passed; if mixing or contact does take place, the passengers concerned and their cabin baggage shall be re-screened before boarding an aircraft.

4.2.3 Each Contracting State shall establish measures to ensure that the aircraft operator and the pilot-in-command are informed when passengers are obliged to travel because they have been the subject of judicial or administrative proceedings, in order that appropriate security measures can be taken.

4.2.4 **Recommendation.** Each Contracting State should require operators providing service from that State, to include in their security programmes, measures and procedures to ensure safety on board their aircraft when passengers are to be carried who are obliged to travel because they have been the subject of judicial or administrative proceedings.

4.2.5 **Recommendation.** Each Contracting State should require measures to be taken to ensure that disembarking passengers do not leave items on board aircraft.

4.3 Measures relating to checked baggage, cargo and other goods

4.3.1 Each Contracting State shall establish measures to ensure that operators when providing service from that State do not transport the baggage of passengers who are not on board the aircraft unless the baggage separated from passengers is subjected to other security control measures.

Note.-This Standard has been applicable since 19 December 1987 with respect to the baggage of passengers at the point of origin and on-line transfer passengers. With respect to the baggage of other categories of passengers, the Standard became applicable on 1 April 1989.

4.3.2 Each Contracting State shall establish measures to ensure that consignments of packages and checked baggage intended for carriage on passenger flights, and using commercial courier services, are also subjected to specific security control, in addition to those provided in 4.3.1.

4.3.3 **Recommendation.** Each Contracting State should establish measures to ensure that baggage intended for carriage on passenger flights, whether accompanied or unaccompanied, when originating from places other than airport check-in counters, is subjected to security control.

4.3.4 Each Contracting State shall ensure the implementation of measures at airports serving international civil aviation to protect cargo, baggage, mail, stores and operator's supplies being moved within an airport and intended for carriage on an aircraft to safeguard such aircraft against an act of unlawful interferences.

4.3.5 Each Contracting State shall establish measures to ensure that cargo and mail intended for carriage on passenger flights subjected to security controls which depend on the threat situation.

4.3.6 Recommendation. Each Contracting State should arrange for secure storage areas at airports serving international civil aviation, where mishandled baggage may be held until forwarded, claimed or disposed of in accordance with local laws.

4.3.7 Recommendation. Each Contracting State should take the necessary measures to ensure that unidentified baggage is placed in a protected and isolated area until such time as it is ascertained that it does not contain any explosives or other dangerous device.

4.4 Measures relating access control

4.4.1 Each Contracting State shall establish procedures and identification systems to prevent unauthorized access by persons or vehicles to:

- a) the air side of an airport serving international civil aviation; and
- b) other areas important to the security of the airport.

4.4.2 Each Contracting State shall establish measures to ensure adequate supervision over the movement of persons to and from the aircraft and to prevent unauthorized access to aircraft.

Chapter 5. Management of Responses to Acts of Unlawful Interference

5.1 Operational aspects of an act of unlawful interference

5.1.1 Each Contracting State shall take adequate measures for the safety of passengers and crew of an aircraft which is subjected to an act of unlawful interference until their journey can be continued.

5.1.2 Each Contracting State responsible for providing air traffic services which is the subject of an act of unlawful interference shall collect all pertinent information on the flight of that aircraft and transmit that information to all other States responsible for the Air Traffic Services units concerned, including those at the airport of known or presumed destination, so that timely and appropriate safeguarding action may be taken en route and at the aircraft's known, likely or possible destination.

5.1.3 Recommendation. Each Contracting State should ensure that information received as a consequence of action taken accordance with 5.1.2 is distributed locally to the Air Traffic Services units concerned, the appropriate airport administrations, the operator and others concerned as soon as practicable.

5.1.4 Each Contracting State shall provide such assistance to an aircraft subjected to an act of unlawful seizure, including the provision of navigational aids, air traffic services and permission to land as may be necessitated by the circumstances.

5.1.5 Each Contracting State shall take measures, as it may find practicable, to ensure that an aircraft subjected to an act of unlawful seizure which has landed in its territory is detained on the ground unless its departure is necessitated by the overriding duty to protect human life, recognizing the importance of consultations, wherever practicable, between the State where that aircraft has landed and the State of the operator of the aircraft.

5.2. Reports

5.2.1 Recommendation. Each Contracting State should exchange information with other States as considered appropriate, at the same time supplying such information to ICAO, related to plans, designs, equipment, methods and procedures for safeguarding international civil aviation against acts of unlawful interference.

5.2.2 A Contracting State in which an aircraft subjected to an act of unlawful interference has landed shall notify by the most expeditious means the State of Registry of the aircraft and the State of the operator of the landing and shall similarly transmit by the most expeditious means all other relevant information to:

- a) the two above-mentioned States;
- b) each State whose citizens suffered fatalities or injuries;
- c) each State whose citizens were detained as hostages;
- d) each Contracting State whose citizens are known to be on board the aircraft; and
- e) the International Civil Aviation Organization

5.2.3 Each Contracting State concerned with an act of unlawful interference shall require its appropriate authority to re-evaluate security measures and procedures in respect of international flights which have been the subject of unlawful interference and take action necessary to remedy weaknesses so as to prevent recurrence.

5.2.4 Each Contracting State concerned with an act of unlawful interference shall provide ICAO with all pertinent information concerning the security aspects of the act of unlawful interference as soon as practicable after the act is resolved.

5.2.5 **Recommendation.** Each Contracting State should adopt measures to ensure that persons acting in an official capacity do not divulge confidential information concerning an act of unlawful interference if such information is likely to jeopardize the safety of international civil aviation.

***Source: ICAO, International Standards and Recommended Practices: Security-Safeguarding International Civil Aviation Against Acts of Unlawful Interference-Annex 17 to the Convention on International Civil Aviation, Montreal: ICAO, 1989

Appendix IV****

Chronology of Significant Missile Attacks Against Civil Aviation (1973-1991)

February 21, 1973

A Libyan Boeing 727 was shot down by an Israeli Phantom F-4E, killing 106 innocent people aboard. The destruction occurred over Sinai Desert, which Israel considered a war zone. Israeli government defended the action, claiming that the French pilot of that aircraft had acted strangely and refused to follow Israeli instructions to land at the nearest airbase, and justified it by citing intelligence report that numerous threats had been made by Black September to hijack an airliner and suicide raid on Israel.

September 5, 1973

Italian police arrest five Arabs armed SAM-7 surface-to-air missile supplied by the Russians to Libya. The terrorists had rented an apartment on the flight path to Rome airport and planning to shoot down an El Al aircraft.

January 5, 1974

Two hundred twenty soldiers and two hundred police sealed off five square miles around Heathrow International Airport after receiving reports that terrorists had smuggled in SAM-7 anti-aircraft missiles by using the diplomatic pouches of Arab embassies, and planned to shoot down an El Al airliner.

January 13, 1975

Members of Carlo's gang try to destroy El Al airliner at Orly airport using hand-held rocket. They missed target, hit Yugoslav airliner instead.

January 19, 1975

A man of North African appearance set up rocket launcher on the terrace over-looking Orly-South ready to open fire on El Al airliner ready to leave for Tel Aviv. This time the Air Police who guard Orly were more alert and a police officers who saw him fired off a burst from his submachine gun. Unhurt, the terrorist fled and was joined by an accomplice, and as they ran into the main hall

one threw a grenade and the other fired into the crowd. To cover their retreat into the toilets, the terrorists threw more grenades and in the confusion grabbed twenty hostages. After bargaining with the French authorities, the terrorists were allowed to leave two days later aboard an Air France flight in return for releasing their hostages. The terrorists were never identified.

April 20, 1978

A Korean Air Lines aircraft which strayed into Soviet air space by mistake was shot and forced to land. Two passengers were killed and 13 others were injured as a result of the attack.

September 3, 1978

Black Nationalist guerrillas, using a missile, shot down a Rhodesian airliner carrying 56 people near Kariba, Rhodesia. Thirty-eight were killed in the ensuing crash and 10 others were killed in a subsequent guerrilla attack launched against the surviving passengers.

February 12, 1979

An Air Rhodesia Viscount was shot down by Patriotic Front guerrillas on its flight between Kariba and Salisbury, killing all fifty-nine aboard. PF leader, Joshua Nkomo, said that the aircraft had been scheduled to carry Lieutenant General Walls, Rhodesian Army commander, and that the plane was therefore a legitimate military target. The guerrillas apparently used Soviet-made Strela heat-seeking missiles, which explode in the jet pipes of turboprop engines.

February 14, 1979

An Air Rhodesia Viscount Turboprop was fired upon in the Rhodesia-Zambia border area during a flight from Kariba to Salisbury, Rhodesia. Five bullet holes were found in the fuselage after the aircraft landed at Salisbury. No injuries reported.

September 1, 1983

A Korean Air Lines, Flight 007, which departed from Anchorage, Alaska, and scheduled to land at Kimpo International Airport in Seoul, Korea, was shot down by a Soviet fighter. The aircraft strayed over Soviet air space by mistake. There were no survivors among the 269 passengers and crew members.

September 21, 1984

A surface to air missile hit a DC-10 Ariana Airliner with 308 passengers and crew aboard. The flight was en route to Kabul from Kandahar. The explosion tore through the aircraft's left engine and damaged its hydraulic system and wing containing the fuel tank. The Captain of the aircraft, however, managed to safely land the aircraft at Kabul International Airport. Reportedly, Afghan counter-revolutionaries were responsible for the attack.

April 4, 1985

Fired two R.P.G. rocket at an Alia airliner as it took off from Athens airport by Abu Nidal terrorist. Although the rocket did not explode, it left a hole in the fuselage.

September 4, 1985

An aircraft of the domestic Baktar Afghan Airlines was shot down with a ground to air missiles as it took off from Kandahar Airport in southern Afghanistan, killing all 47 passengers and 5 crew members aboard. The aircraft, on a scheduled flight from Kabul to the western province of Farah, made a stopover at Kandahar. The Hezb-i-Islami guerrilla organization claimed responsibility for the shoot down. A spokesman for the Hezb-i-Islami guerilla organization reportedly claimed its members shot down the aircraft after receiving information that it was carrying Soviet advisers, Afghan secret police, and military officials, however, information available indicates that all of the passengers killed were civilians.

August 16, 1986

A Sudan Airways twin-engine Fokker F-27 aircraft carrying 57 passengers and three crew members was shot down over rebel-held southern Sudan, killing all aboard. The aircraft was destroyed by a surface-to-air missile(SA-7) minutes after departing the airport in Malakal, Sudan. The attack was committed by rebels of the Sudanese People's Liberation Army(SPLA).

May 5, 1987

A Cessna 404 operated by Sudanese Aeronautical Services Ltd.(SASCO) was shot down as it left Malakal airport en route to Khartoum, Sudan. Eleven

passengers and two crew were killed. A rebel group, the Sudanese People's Liberation Army, claimed responsibility.

November 6, 1987

An Air Malawi Skyvan-3 was shot down by Mozambique armed forces as it passed over Ulongue while en route from Blantyre to Lilongwe, Malawi. Eight passengers and two crew members were killed in the crash. According to military officials in Mozambique, the aircraft was flying in violation of Mozambican air space.

July 3, 1988

An Iran Air A-300 aircraft was shot down by the USS Vincennes over the Persian Gulf. The U.S. warship, which had been engaged in combat with small surface vessels in the Gulf, mistook the airliner for an attacking fighter aircraft. As many as 290 passengers and crew on the aircraft died.

August 8, 1988

Angolan fighter planes mistakenly fired on and damaged a BAe 125 series 8000 jet carrying the President of Botswana on a flight. The President was slightly injured.

September 23, 1988

Nile Safaris B-707, which was landing at Juba, Sudan, was attacked with machine guns and rocket propelled grenades by rebels of the SPLA.

December 8, 1988

Two DC-7 aircraft operating under a locust spraying contract for the U.S. Agency for International Development were fired on with SA-7 surface-to-air missiles in the Western Sahara. One of the aircraft was shot down and five people were killed. The second aircraft was damaged but managed to land safely at Sidi Ifini, Morocco. The Polasario, an insurgent group that opposes Moroccan sovereignty over the Western Sahara, admitted that its forces shot down the aircraft but claimed that it did so by mistake.

September 5, 1989

A U.S. AIR flight en route from the Bahamas to Florida, was hit by a gunshot while it was landing. The bullet pierced the aircraft door and grazed a passenger's head.

December 21, 1989

A Medecines Sans Frontiers (Doctors Without Borders) French relief aid aircraft with four passengers and crew was shot down by a missile after departing from Awell en route to Khartoum. The Sudanese People's Liberation Army (SPLA), which was fighting with the Sudanese government, is allegedly responsible for the incident. There were no survivors from the incident.

February 22, 1991

An unidentified Airlines An-26 passenger flight was shot down by ground-launched missile over Cazombo, eastern Angola. A total of 47 fatalities were reported.

March 16, 1991

A Transafrik Airlines Lockheed L-100 aircraft was shot down by UNITA guerrillas near Malanje, Angola.

July 10, 1991

A group of drunken police fired at the Aerochasqui Airlines C-212 aircraft to prevent take-off, intending to inspect it for drugs. As a result of the attack, a crew was killed and the aircraft was crashed.

****Data are drawn from various sources: Christopher Dobson and Ronald Payne, The Carlos Complex: A Pattern of Violence, London: Hodder & Stoughton, 1977; Alexander Dallin, Black Box: KAL 007 and the Superpowers, Berkeley: University of California Press, 1985; Edward F. Mickolus, Transnational Terrorism: A Chronology of Events, 1969-1979, London: Aldwych Press, 1980; Christopher Dobson and Ronald Payne, War Without End, London: Harrap, 1986; U.S. Department of Transportation, FAA, Significant Worldwide Criminal Acts Involving Civil Aviation: 1978 and 1979; U.S. Department of Transportation, FAA, Criminal Acts Against Civil Aviation: 1986, 1988 and 1989; U.S. Department of Defence, Terrorist Group Profiles, Washington, DC: U.S. GPO, 1989; David Learmount, "Is Nothing Safe?", Flight International, 29 January - February 4, 1992

Appendix V

Worldwide Criminal Acts Involving Civil Aviation: Countries Involved(1931-1990)

Afghanistan; Algeria; Angola; Argentina; Aruba; Austria; Australia

Bahamas; Bahrain; Bangladesh; Barbados; Belgium; Bolivia; Botswana; Brazil;
Bulgaria; Burma

Canada; Chile; China; Colombia; Congo; Corsica; Costa Rica; Cuba; Cyprus;
Czechoslovakia

Denmark; Dominican Rep.; Djibouti Rep.

Egypt; Ethiopia; El Salvador; Ecuador

France; Finland; Fiji

Great Britain; Greece; Guadeloupe; Guatemala; East and West Germany

Haiti; Honduras; Hungary

India; Indonesia; Iran; Iraq; Ireland; Iceland; Israel; Italy; Ivory Coast

Japan; Jamaica; Jordan

Kenya; Kuwait; Korea

Lebanon; Libya; Luxembourg

Morocco; Malta; Mexico; Malaysia

Nicaragua; Netherlands; New Zealand; Norway

Panama; Pakistan; Phillipines; Peru; Poland; Portugal

Qatar

Romania; Rhodesia

Saudi Arabia; Seychelles; Singarpore; South Africa; Spain; Sri Lanka; Sweden;
Switzerland; Syria; Sudan; Somalia

Tanzania; Thailand; Taiwan; Trinidad Tobago; Tunisia; Turkey

USSR; USA; Uruguay; Uganda; UAE(United Arab Emirate)

Venezuela; Vietnam

Yemen; Yugoslavia

Zambia; Zimbabwe

Total: 117

Bibliography

Principal Sources

A Lingering Nightmare: The Rangoon Bombing, Korean Overseas Information Service, October, 1984

"A Statement by Kim Hyon-Hui on the Bombing of Korean Air Flight KE-858", December 28, 1987

Aaronson, Michael, "Terrorism or Freedom Fighting?: A Minefield in International Relations", *International Relations*, Vol. 8, No. 6, November, 1986

Abeyrante, PIR, "Aerial Piracy and Extended Jurisdiction in Japan", *ICLQ*, July, 1984

Abeyrante, Narinder, "Air Hijacking: An International Perspective", *International Conciliation*, No. 585, November, 1971

Abramovsky, Abraham, "The Constitutionality of the Anti-Hijacking Security System", *Buffalo Law Review*, 1972-72

Adams, James, *The Financing of Terror*, London: New English Library, 1986

-----, *Trading in Death: Weapons, Warfare and the New Arms Race*, London: Hutchinson, 1990

Alexander, Y. and Kilmarx, R. A.(ed), *Political Terrorism and Business*, New York: Praeger Publishers, 1979

Alexander, Y., David Carlton and Paul Wilkinson(ed), *Terrorism, Theory and Practice*, Colorado: Westview Press, 1979

Alexander, Y. and Joshua Sinai, *Terrorism: The PLO Connection*, London: Crane Russak, 1989

Alexander, Y. and Robert G. Picardo, *In the Camer's Eye: News Coverage of Terrorist Events*, New York: Brassey's, 1991

Alexander, Y. and Richard Latter, *Terrorism & the Media*, New York: Brassey's, 1990

- Alexander, Y. and Eugene Sochor, *Aerial Piracy and Aviation Security*, The Netherlands: Martinus Nijhoff, 1991
- Alexander, Y.(ed), *International Terrorism: National, Regional, and Global Perspectives*, New York: Praeger Publishers, 1976
- , *The 1986 Annual on Terrorism*, Dordrecht: Martinus Nijhoff Publishers, 1987
- Alexander, Y., "State Sponsored Terrorism: Low Intensity Warfare", Occasional Paper of the Centre for Contemporary Studies, No. 3, June, 1986
- Amos, John W., *Palestinian Resistance: Organization of a Nationalist Movement*, New York: Pergamon Press, 1980
- Arey, James, *The Sky Pirates*, New York: Scribner's, 1972
- Ashley, Steven, "Can Technology Stop Terror in the Air?", *Popular Science*, Vol. 227, November, 1984
- Atterton, Harry, "Security: IATA Steps In", *IATA Review*, July-September 1985
- Avruch, Steven N., "The 1983 Korean Air Lines Incident: Highlighting the Law of International Air Carrier Liability", *Boston College International & Comparative Law Review*, Vol. VIII, No. 1, 1985
- Becker, Jillian, *The PLO: The Rise and Fall of the Palestine Liberation Organization*, London: George Weidenfeld and Nicolson, 1984
- Bensinger, Gad J., "The Israel Police and Terrorism Management", *Journal of Crime and Justice*, Vol. 6, 1983
- Bernstein, Alvin H., "Iran's Low-Intensity War Against The United States", *ORBIS*, Spring 1986
- Bermudez, Jr., Joseph S., *Terrorism: The North Korean Connection*, London: Crane Russak, 1990
- Boire, Martin C., "Terrorism Reconsidered as Punishment: Toward an Evaluation of the Acceptability of Terrorism as a Method of Social Change or Maintenance", *Stanford Journal of International Law*, Vol. 20, 1984
- Borkowski, George M., "Use of Force: Interception of Aircraft-Interception of Egyptian airliner by the United States, Oct. 10, 1985; interception of

- Libyan airplane by Israel, Feb. 3, 1986", *Harvard International Law Journal*, Vol. 27, 1986
- Boyle, Robert P., "International Action to Combat Aircraft Hijacking", *Lawyer of the Americas*, Vol. 4, 1972
- Brenchley, Frank, "Living with Terrorism: The Problem of Air Piracy", *Conflict Studies*, No. 184, 1986
- Brogan, Patrick, *Eastern Europe, 1939-1989: The Fifty Years War*, London: Bloombury Publishing Ltd, 1990
- Brownlie, Ian, *Principle of Public International Law*, Oxford: Clarendon Press, 1979
- Burton, Anthony, *Urban Terrorism: Theory, Practice and Response*, London: Leo Cooper, 1975
- , *Revolutionary Violence: The Theories*, London: Leo Cooper, 1977
- Captain 'X' and Reynolds Dodson, *Unfriendly Skies*, London: Sphere Books, 1990
- Cattan, Henry, *The Palestine Question*, London: Croom Helm, 1988
- , *Palestine and International Law: The Legal Aspects of the Arab-Israeli Conflict*, London: Longman Group, 1973
- Catudal, Honore M., *Nuclear Deterrence: Does it Deter?*, London: Mansell Publishing, 1985
- Celmer, Marc A., *Terrorism, U.S. Strategy, and Regan Policies*, London: Mansell Publishing Ltd, 1987
- Chaliand, Gerard, *Terrorism: From Popular Struggle to Media Spectacle*, London: Saqi Books, 1987
- Chant, Christopher, *Air Defence Systems and Weapons: World AAA and SAM Systems in the 1990s*, London: Brassey's Defence Publishers, 1989
- Cheng, Bin, *The Law of International Air Transport*, London: Stevens and Sons, 1962
- Clawson, Patrick, "Coping with Terrorism in the United States", *ORBIS*, Summer 1989

- , "Terrorism in Decline?", ORBIS, Spring 1988
- Cline, Ray S. and Yonah Alexander, *Terrorism as State-Sponsored Covert Warfare*, Virginia: Hero Books
- Clubb, Oliber, *KAL Flight 007: The Hidden Story*, New York: Permanent Press, 1986
- Clutterbuck, Richard, *Kidnap, Hijack and Extortion: The Response*, London: Macmillan Press, 1987
- , *Terrorism and Guerrilla Warfare: Forecasts and Remedies*, London: Routledge, 1990
- , *Terrorism, Drugs and Crime in the Europe After 1992*, London: Routledge, 1990
- , *Guerrillas and Terrorists*, London: Faber and Faber, 1977
- , *Living with Terrorism*, London: Faber and Faber, 1975
- , *Kidnap and Ransom*, London: Faber and Faber, 1978
- Clyne, Peter, *An Anatomy of Skyjacking*, London: Abelard-Schuman, 1973
- Cobban, Helena, *The Palestinian Liberation Organisation: People, Power and Politics*, Cambridge: Cambridge University Press, 1984
- Cockburn, Andrew, *The Threat: Inside the Soviet Military Machine*, London: Hutchinson, 1983
- Connor, Michael, *Terrorism: Its Goals, Its Targets, Its Methods*, Colorado: Paladin Press, 1987
- Cooley, John K., *Green March: Black September*, London: Frank Cass, 1973
- "Coordination Committee Statement on Security", NC20168 Beirut Domestic Service in Arabic, 1400 GMT, July 20, 1985, SWB/Monitoring Report, July 22, 1985
- Corcoran, Farrel, "KAL 007 and the Evil Empire: Mediated Disaster and Forms of Rationalization", *Critical Studies in Mass Communication*, Vol. 3, 1986
- Corn, David, "Fear and Obstruction on the K.A.L. Trail", *The Nation*, August 17-24, 1985
- Creig, D. W., *International Law*, London: Butterworth, 1976

- Crenshaw, Martha, "The Causes of Terrorism", *Comparative Politics*, April, 1981
- Dallin, Alexander, *Black Box: KAL 007 and the Superpowers*, Berkeley: University of California Press, 1985
- Dawisha, Karen, *Eastern Europe, Gorbachev and Reform: The Great Challenge (Second Edition)*, New York: Cambridge University Press, 1990
- Degenhardt, Henry W., *Political Dissent: An International Guide to Dissident, Extraparliamentary, Guerrilla and Illegal Movement*, London: Longman Group, 1983
- Demaris, Ovid, *Brothers in Blood: The International Terrorist Network*, New York: Scribner's, 1977
- Denaro Jacob M., "States' Jurisdiction in Aerospace under International Law", *Journal of Air Law and Commerce*, Vol. 36, 1970
- Dewar, Michael, *Weapons and Equipment of Counter-Terrorism*, London: Arms and Armour Press, 1987
- Dobson, Christopher, *Black September: Its Short, Violent History*, London: Robert Hale & Company, 1974
- Dobson, Christopher and Ronald Payne, *The Weapons of Terror: International Terrorism at Work*, London: Macmillan Press, 1979
- , *Terror!: The West Fights Back*, London: Macmillan Press, 1982
- , *The Carlos Complex: A Pattern of Violence*, London: Hodder and Stoughton, 1977
- , *War without End: The Terrorists: An Intelligence Dossier*, London: Sphere Books, 1987
- , *Counterattack: The West's Battle against the Terrorists*, New York: Facts On File, 1982
- Dorey, Frederick, *Aviation Security*, London: Granada Publishing, 1983
- , "Airport Security: How to be fruitful, though sterile", *ICAO Bulletin*, October 1978

- Dudley, Christopher, "Hijacking and Terrorist Attacks Against Aircraft and Airport Installations", *Journal of the Insurance Institute of London*, Vol. 65, 1976-77
- Elliot, John D. and Leslie K. Gibson, *Contemporary Terrorism: Selected Readings*, Maryland: International Association of Chiefs of Police, 1978
- Elsenberg, Dennis and Eli Landau, Carlos: *Terror International*, London: Corgi Books, 1976
- Evans, Alona E. and John F. Murphy, *Legal Aspects of International Terrorism*, Lexington: D.C. Heath and Co., 1978
- Evans, Alona E., "Aircraft Hijacking: Its Cause and Cure", *A.J.I.L.*, 1969
- , "Aircraft Hijacking: What is being done?", *A.J.I.L.*, 1973
- , "Perspectives on International Terrorism", *Willamette Law Review*, Vol. 17, Winter, 1980
- Evans, Ernest, *Calling a Truce to Terror: The American Response to International Terrorism*, London: Greenwood Press, 1979
- "Findings of the Investigation by the Government of the Republic of Korea on the Destruction of Korean Air Flight 858", *ROK Ministry of Foreign Affairs*, March, 1988
- Finger, Seymour Maxwell, "Security of International Civil Aviation: The Role of ICAO", *Terrorism: An International Journal*, Vol. 6, No. 4, 1983
- FitzGerald, Gerald F., "Toward Legal Suppression of Acts against Civil Aviation", *International Conciliation*, No. 585, November, 1971
- , "The Use of Force against Civil Aircraft: The Aftermath of the KAL Flight 007 Incident", *Canadian Yearbook of International Law*, 1984
- Fontaine, Roger W., *Terrorism: The Cuban Connection*, London: Crane Russak and Co., 1988
- Forman, Patrick, *Flying into Danger: The Hidden Facts about Air Safety*, London: Heinemann, 1990
- Fouilloux, Gerard, "The Destruction of the K.A.L. 747 and the Law", *ITA Magazine*, No. 10, November, 1983
- Fox, James R., "International Law and the Interception of Civil Aircraft: Flight 007", *Dick Law Review*, Vol. 88, 1984

- Frangi, Abdallah, *The PLO and Palestine*, London: Zed Books, 1983
- Fraser, T. G., *The Middle East, 1914-1979: Documents of Modern History*, London: Edward Arnold, 1980
- Freeman, N., "Aviation Security Training is a Necessity", *ICAO Bulletin*, November 1979
- Freedman, Lawrence, Christopher Hill, Adam Roberts, R.J. Vincent, Paul Wilkinson and Philip Windsor, *Terrorism and International Order*, London: Routledge and Kegan Paul, 1986
- Frey, R. G., *Violence, Terrorism, and Justice*, Cambridge: Cambridge University Press, 1991
- Geldard, Ian, "Mystery Missiles Investigated", *Conflict International*, Vol. 6, No. 3, July 1991
- George, Alexander(ed), *Western State Terrorism*, Cambridge: Polity Press, 1991
- Geraghty, Tony, *Who Dares Wins: The Story of the SAS 1950-1982*, Glasgow: William Collins Sons and Company, 1983
- Gibbs-Smith, Charles H., *The Aeroplane: An Historical Survey of Its Origin and Development*, London: Her Majesty's Stationary Office, 1960
- Gilbert, Martin, *The Arab-Israeli Conflict: Its History in Maps*, London: Weidenfeld and Nicolson, 1974
- Gilmour, David, *Dispossessed: The Ordeal of the Palestinians*, London: Sedgwick and Jackson, 1980
- Golan, Galia, *The Soviet Union and the Palestinian Liberation Organization*, New York: Praeger Press, 1986
- Goren, Roberta, *The Soviet Union and Terrorism*, London: George Allen & Unwin, 1984
- Gordon, Joseph S.(ed), *Psychological Operations: The Soviet Challenge*, Colorado: Westview Press, 1988
- , *Gorbachev's "New Thinking" on Terrorism*, New York: Praeger, 1990
- Green, L. C., *International Law through the Cases*, London: Stevens & Sons Ltd, 1959

- Gresh, Alain, *The PLO: The Struggle Within: Toward an Independent Palestinian State*, London: Zed Books, 1985
- Haggman, Bertil, "The Vulnerable Modern Industrial Society", *Jerusalem Journal of International Relations*, Vol. 3, 1978
- Hailbronner, Kay, "Freedom of the Air and the Convention on the Law of the Sea", *American Journal of International Law*, Vol. 77, 1983
- Hanle, Donald J., *Terrorism: The Newest Face of Warfare*, New York: Pergamon-Brassey's International Defense Publishers, Inc., 1989
- Hapdong News Agency (ed), *Korea Annual 1978*, Seoul, Korea: Hapdong News Agency, 1978
- Hart, Alan, *Arafat: Terrorist or Peacemaker*, London: Sidgwick and Jackson, 1984
- Haslam, Jonathan, "The KAL Shootdown (1983) and the State of Soviet Air Defence", *Intelligence and National Security*, Vo. 3, No. 4, 1988
- Hassan, Farooq, "The Shooting Down of Korean Airlines Flight 007 By the USSR and The Future of Air Safety for Passengers", *International and Comparative Law Quarterly*, Vo. 33, July 1984
- , "A Legal Analysis of the Shooting of Korean Airlines Flight 007 by the Soviet Union", *Journal of Air Law and Commerce*, Vol. 49, 1983-84
- Hersh, Seymour, *The Target is Destroyed: What Really Happened to Flight 007 and What America Knew About It*, London: Faber and Faber, 1986
- Herzog, Chaim, *The Arab-Israeli Wars: War and Peace in the Middle East*, London: Arms and Armour Press, 1982
- Hiro, Dilip, *Inside the Middle East*, London: Routledge and Kegan Paul, 1982
- Holyst, Brunon, "The Abduction of Polish Airlines "LOT" Planes", *Violence, Aggression and Terrorism*, Vol. 3, No. 1/2, 1989
- Horlick, Gary N., "The Developing Law of Air Hijacking", *Harvard International Law Journal*, Vol. 12, 1972
- Horvitz, Joanne, "Arab Terrorism and International Aviation", *Chitty's Law Journal*, Vol. 24, No. 5, 1976

- Hubbard, David G., *The Skyjackers: His Flights of Fantasy*, New York: Collier Books, 1973
- , *Winning Back the Sky: A Tactical Analysis of Terrorism*, Dallas, TX.: Saybrook Publishing Co., 1986
- Hughes, David, "ICAO Members Urged to Boost Efforts Against Sabotage", *Aviation Week & Space Technology*, February 20, 1989
- Hughes, William J., "Aerial Intrusions by Civil Airlines and the Use of Force", *Journal of Air Law and Commerce*, Vol. 45, 1980
- Hunter, Shireen T., "Iran and the Spread of Revolutionary Islam", *Third World Quarterly*, Vol. 10, No. 2, 1988
- ICAO, "Protocol relating to an amendment to the Convention on International Civil Aviation, [Article 3 bis]", *International Legal Materials*, Vol. 23, 1984
- ICAO, "Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation, Supplementary to the Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation", Done at Montreal on 23 September 1971, *International Legal Materials*, Vol. 27, 1988
- ICAO, "Council Resolution Concerning Israeli Attack on Libyan Civil Aircraft", *International Legal Materials*, Vol. 12, 1973
- Igbinovia, Patrick Edobor, "Terrorist Aircraft Hijacking and Sabotage in African States", *International Journal of Comparative and Applied Criminal Justice*, Vol. 10, No. 1, 1986
- Ingram, Temple B., "Are Airport Searches Still Reasonable?", *J.A.L.C.*, 1978
- Investigation Findings: Explosion of Korean Air Flight 858, Seoul, Korea: Korean Overseas Information Service, January 1988
- Hyams, Edward, *Terrorists and Terrorism*, London: J.M. Dent and Sons, 1975
- Janke, Peter, *Guerrilla and Terrorist Organisations: World Directory and Bibliography*, Brighton: Harvester Press, 1983
- Jacobson, Peter M., "From Piracy on the High Seas to Piracy in the High Skies: A Study of Aircraft Hijacking", *Cornell International Journal*, Vol. 5, 1972

- Jennings, R. Y., "International Civil Aviation and the Law", *British Yearbook of International Law*, Vol. XXII, 1945
- Jenkins, Brian M., "Trends in International Terrorism", *World Affairs Journal*, Vol. 3, Spring, 1984
- , "New Modes of Conflict", *ORBIS*, Vol. 28, Spring, 1984
- , "Combating Terrorism becomes a War", *RAND Paper-6988*, May, 1984
- , "The Terrorist Threat to Commercial Aviation", *RAND Paper-7540*, March, 1989
- Jiwa, Salim, *The Death of Air India Flight 182*, London: Star Book, 1986
- John, Peter St., *Air Piracy, Airport Security and International Terrorism: Winning the War Against Hijackers*, Westport, CT: Quorum Books, 1991
- Johnson, R. W., *Shootdown: The Verdict on KAL 007*, London: Unwin Hyman, 1986
- Johnston, David, *Lockerbie: The Real Story*, London: Bloombury Publishing, 1989
- Jonsson, Christer, *International Aviation and the Politics of Regime Change*, London: Frances Pinter Publishers, 1987
- Joyner, Nancy D., *Aerial Hijacking as an International Crime*, New York: Oceana, 1973
- Jureidini, Paul A. and William E. Hazen, *The Palestinian Movement in Politics*, Lexington: D.C. Heath and Co., 1976
- Kapteyn P.J.G., R.H. Lauwaars, P.H. Kooijmans, H.G. Schermers and M. Van Leeuwen Boomkamp (ed), *International Organization and Integration: Annotated Basic Documents and Descriptive Directory of International Organizations and Arrangements*, Vol. I.B., Hague: Martinus Nijhoff Publishers, 1982
- Katz, Samuel M., *Guards Without Frontiers: Israel's War Against Terrorism*, London: Arms and Armour Press, 1990
- Kayyali, A.W., *Palestine: A Modern History*, London: Croom Helm, 1978
- Kazziha, Walid W., *Palestine in the Arab Dilema*, London: Croom Helm, 1979

- Kegley, Jr., Charles W.(ed), *International Terrorism: Characteristics, Causes, Controls*, London: Macmillan Education, 1990
- Kenez, Peter, "Lessons for the West: How Moscow Handled the 007 Affair", *The New Leader*, October 31, 1983
- Khaled, Leila, *My People shall Live: The Autobiography of a Revolutionary*, London: Hodder and Stoughton, 1973
- Khoury, Fred J., *The Arab-Israeli Dilemma*, New York: Syracuse University Press, 1976
- Kim, Hyun-Hui, *Now I Want be a Woman(I & II): The Autobiography of Kim Hyun-Hui*, Seoul, Korea: Koreowon, 1991
- Klare, Michael T., "The Arms Trade: Changing Patterns in the 1980s", *Third World Quarterly*, Vol. 9, Mo. 4, 1987
- Knowles, Graham, *Bomb Security Guide: A Step-by-Step Emergency Response Program Against Bomb Threats and Letter Bombs*, California: Security World Publishing Co., 1976
- Kotowski, A., "A Review of Modern X-Ray Screening Devices", *ICAO Bulletin*, October 1986
- Kramer, Martin N., "Continuing Controversy over KE 007", *Survival*, Vol. 28, No. 1, January-February 1986
- Kuriyama, Yoshihiro, "Terrorism at Tel Aviv Airport and a "New Left" Group in Japan", *Asian Survey*, Vol. 13, January-June, 1973
- Kruzhin, Peter, "Severer Punishment for Military Offenses", *Radio Liberty Research*, RL 86/ 84, February 21, 1984
- Laffin, John, *Fedayeen: The Arab-Israeli Dilemma*, New York: Free Press, 1973
- Lakos, Amos, *International Terrorism: A Bibliography*, Colorado: Westview Press, 1986
- Lapidus, Gail Warshofsky, "KAL 007 and Chernobyl: The Soviet management of crises", *Survival*, Vol. 29, No. 3, May-June 1987
- Laqueur, Walter, *The Age of Terrorism*, London: George Weidenfeld and Nicolson, 1987
- , "Reflections on Terrorism", *Foreign Affairs*, Fall, 1986

- Laquer, Walter and Barry Rubin, *The Arab-Israeli Reader: A Documentary History of the Middle East Conflict*, London: Penguin Books, 1984
- Laquer, Walter and Yonah Alexander, *The Terrorism Reader*, London: Meridian Books, 1987
- Learmount, David, "Is Nothing Safe?", *Flight International*, January 29-February 4, 1992
- "Legal and Political Challenges in European Aviation", Additional Conference Documentation, 21 and 22 June, 1989, Madrid, Spain
- Leich, Marian Nash, "Destruction of Korean Airliner: Action by International Organizations", *American Journal Of International Law*, Vol. 78, 1984
- Leppard, David, *On the Trail of Terror: The Inside Story of the Lockerbie Investigation*, London: Jonathan Cape, 1991
- Levitt, Geoffrey M., *Democracies against Terror: The Western Response to State-Supported Terrorism*, New York: Praeger Publishers, 1988
- Lewis, Aryeh and Meir Kaplan(ed), *Terror in the Skies: Aviation Security*, Jerusalem: Hemed Press, 1990
- Lissitzyn, Oliver J., "The Treatment of Aerial Intruders in Recent Practice and International Law", *American Journal of International Law*, Vol. 47, 1953
- , "Some Legal Implications of the U-2 and RB-47 Incidents(Editorial Comment)", *American Journal of International Law*, Vol. 56, 1962
- Livingston, Marius H., *International Terrorism in the Contemporary World*, London Greenwood Press, 1978
- Livingstone, Neil C., and David Halevy, *Inside the PLO: Covert Units, Secret Funds, and the War Against Israel and the United States*, New York: William Morrow and Company, Inc., 1990
- Lodge, Juliet(ed), *The Threat of Terrorism*, Sussex: Wheatsheaf Books, 1988
- Lopez, George A., "Teaching about Terrorism: Note on Methods and Materials", *Terrorism: An International Journal*, Vol. 3, No. 1-2, 1979
- MacDonald, Eileen, *Shoot the Woman First*, London: Fourth Estate, 1991
- Machado, Francois, "The Destruction of the KAL 007(KE 007) - How Did It Happen?", *ITA Magazine*, January, 1984

- Mac Kenzie-Orr, M. H., "Aviation Security In An Age of Terrorism", *Flight Safety Digest*, December 1988
- Majid, A. A., "Jural Aspects of Unauthorised Entry into Foreign Airspace", *Netherlands International Law Review*, Vol. 22, 1985
- Malcher, Alan, "Sophisticated Weapons and their Availability", *The Police Journal*, October 1989
- , "Missile Available Illegally", *Flight International*, May 20, 1989
- Mankiewicz, R. H., "The 1970 Hague Convention in a Symposium on Hijacking", *J.A.L.C.*, Vol. 37, 1971
- Martin, Peter, "Destruction of Korean Air Lines Boeing 747 over Sea of Japan, 31 August 1983", *Air Law*, Vol. IX, No. 3, 1984
- Martin, David C. and John Walcott, *Best Laid Plans: The Inside Story of America's War Against Terrorism*, New York: Harper & Row, 1988
- Mastny, Vojtech(ed), *Soviet/East European Survey 1983-1984: Selected Research and Analysis from Radio Free Europe/Radio Liberty*, Durham: Duke University Press, 198
- McCarthy, Gerard Michael, "Limitations on the Right to Use Force against Civil Aerial Intruders: The Destruction of KAL Flight 007 in Community Perspective", *New York Law School Journal of International and Comparative Law*, Vol. 6, 1984
- McClintock, Michael C., "Skyjacking: Its Domestic Civil and Criminal Ramifications", *J.A.L.C.*, Vol. 37, 1971
- McGuire, Frank G., "Explosive Detection Producing Explosive Controversy", *Airport Operations*, November/December 1989
- McCrea, Barbara P., Jack C. Plano and George Klein, *The Soviet and East European Political Dictionary*, California: ABC Clio Information Services, 1984
- McWhinney, Edward, *Aerial Piracy and International Terrorism: The Illegal Diversion of Aircraft and International Law*: Dordrecht, Netherlands: Martinus Nijhoff Publishers, 1987
- Melman, Yossi, *The Master Terrorist: The True Story Behind Abu Nidal*, London: Sidgwick & Jackson, 1986

- Merari, Ariel, "International Terrorism and Civil Aviation", Inter: International Terrorism 1987(JCSS), 1989
- Merari, Ariel and Shlomi Elad, "The International Dimension of Palestinian Terrorism", JCSS Study, No. 6, 1986
- Micklous, Edward F., Transnational Terrorism: A Chronology of Events, 1969-1979, London: Aldwych Press, 1980
- Mickolus, Edward, F., Todd Sandler, and Jean M. Murdock, International Terrorism in the 1980s: A Chronology of Events, Vol. 1, 1980-1983, Iowa: Iowa State University Press, 1989
- Milde, Michael, "Interception of Civil Aircraft vs. Misuse of Civil Aviation", Annals of Air and Space Law, Vol. XI, 1986
- Morgan, Craig A., "The Shooting of Korean Air Lines Flight 007: Responses to Unauthorized Aerial Incursions", in Reisman, Michael W. and Andrew R. Willard (ed), International Incidents, Princeton, N.J.: Princeton University Press, 1988
- Moorehead, Caroline, "Terrorism in the Air", New Society, June, 1985
- Moore, Kenneth C., Airport and Airline Security, California: Security World Publishing Co., 1976
- Morris, Benny, The Birth of the Palestinian Refugee Problem: 1947-1949, Cambridge: Cambridge University Press, 1987
- Morris, Eric and Alan Hoe, Terrorism: Threat and Response, London: Macmillan Press, 1987
- Murder in the Sky: A Soviet Atrocity, Seoul, Korea: Korean Overseas Information Service
- Nacos, Brigitte, David P. Fan and John T. Young, "Terrorism and the Print Media: The 1985 TWA Hostage Crisis", Terrorism: An International Journal, Vol. 12, 1989
- Netanyahu, Benjamin(ed), Terrorism: How the West Can Win, London: Weidenfeld and Nicolson, 1986
- Newton, Eric, "Investigating Explosive Sabotage in Aircraft", The International Journal of Aviation Safety, March 1985

- "New Airport Security Measures Take Effect", NC191416 Beirut Domestic Service in Arabic, 1300 GMT, July 19, 1985, SWB/Monitoring Report, July 22, 1985
- O'Ballance, Edgar, *Language of Violence: The Blood Politics of Terrorism*, California: Presidio Press, 1979
- , *Arab Guerrilla Power: 1967-1972*, London: Faber and Faber, 1974
- , *Terrorism in the 1980s*, London: Arms and Armour, 1989
- , "Aviation and Airport Security", *Military Digest*, April-May 1989
- O'Brien, William V., "Counterterrorism: Lessons from Israel", *Strategic Review*, Vol. 13, Fall 1985
- Ofri, Arie, "Intelligence and Counter-Terrorism", *ORBIS*, Vol. 28, No. 1, 1984
- O Maolain, Ciaran, *Latin American Political Movements*, Essex, U.K.: Longman Group, 1985
- O'Mara, Maureen T., "KAL 007: A Definitive Denouement", *Suffolk Transnational Law Journal*, Vol. 8, 1984
- "On Explosion of Korean Air Flight 858", Statement by Mr. Kwang Soo Choi, Minister of Foreign Affairs, at the UN Security Council, February 16, 1988
- O'Neill, Bard E., *Armed Struggle in Palestine: A Political-Military Analysis*, Colorado: Westview Press, 1978
- Ontiveros, Suzanne R., *Global Terrorism: A Historical Bibliography*, California: ABC-Clio, Inc., 1986
- Osmanczyk, Edmund Jan (ed), *The Encyclopedia of the United Nations and International Agreements*, London: Taylor and Francis, 1985
- O'Sullivan, Noel, *Terrorism, Ideology and Revolution: The Origins of Modern Political Violence*, Sussex: Wheatsheaf Books, 1986
- Ovendale, Ritchie, *The Origins of the Arab-Israeli Wars*, London: Longman Group, 1984
- Paschall, Rod, *LIC 2010: Special Operations & Unconventional Warfare in the Next Century*, Virginia: Brassey's, 1990

- Pauling, Linus (ed), *World Encyclopedia of Peace*, Vol. 1, New York: Pergamon Press, 1986
- Pearson, David, "K.A.L. 007: What the U.S. Knew and When We Knew It", *The Nation*, August 18-25, 1984
- Pearson, David and John Keppel, "New Pieces in the Puzzle of Flight 007", *The Nation*, August 17-24, 1985
- Peretz, Don, "Arab Palestine: Phoenix or Phantom?", *Foreign Affairs*, Vol. 48, January, 1970
- Phalen, Tom and Gregory G. Fergin, "Terrorism: A Hijacking and a Coup", U.S. Department of State Newsletter, January, 1978
- Phelps II, John T., "Aerial Intrusions by Civil and Military Aircraft in Time of Peace", *Military Law Review*, Vol. 107, 1985
- Phillips, David, *Skyjack: The Story of Air Piracy*, London: George G. Harrap and Co., 1973
- Phipps, D., "Airport Security: Where do we go from here?", *ICAO Bulletin*, October 1981
- Pierre, Andrew J., "The Politics of International Terrorism", *ORBIS*, Vol. 19, No. 3-4, 1975-76
- Pipes, Daniel, "Why Asad's Terror Works and Qadhafi's Does Not", *ORBIS*, Fall 1989
- Plano, Jack C. and Roy Olton (ed), *The International Relations Dictionary* (3rd Edition), California: ABC-Clio, 1982
- Plunk, Daryl M., "North Korea: Exporting Terrorism", *Backgrounders* (Asian Studies Center of the Heritage Foundation), No. 74, February 25, 1988
- Porath, Y. *The Palestinian Arab National Movement: From Riots to Rebellion*, Vol. 2: 1929-1939, London: Frank Cass and Co., 1977
- Possony Stefan T. and L. Francis Bouchev, *International Terrorism: The Communist Connection*, American Council for World Freedom(ACWF), 1978
- Prince, Michael, *Crash Course: The World of Air Safety*, London: Grafton Books, 1990

- Prosser, Brian, "Aviation Security Systems Have Grown To Match The Threat", ICAO Bulletin, October 1985
- Quandt, William B., Fuad Jabber and Ann Mosely Lesch, The Politics of Palestinian Nationalism, California: University of California Press, 1973
- Ra'anani, Uri, Robert L. Pfaltzgraff, Jr., Richard H. Shultz, Ernst Halperin and Igor Lukes(ed), Hydra of Carnage: The International Linkages of Terrorism and Other Low-Intensity Operations, Lexington: Lexington Books, 1986
- Reich, Walter(ed), Origins of Terrorism: Psychologies, Ideologies, Theologies, States of Mind, New York: Cambridge University Press, 1990
- Rein, Bert, "A Government Perspective in a Symposium on the Unlawful Seizure of Aircraft", I.C.L.Q., Vol. 37, 1971
- Rivers, Gayle, The War against the Terrorists: How to Win It, New York: Charter Books, 1987
- Robert, Chauncey, "Certainty, Secerity, and Skyjacking, Criminology", February, 1975
- Rohmer, Richard, Massacre 007: The Story of the Korean Air Lines Disaster, London: Hodder and Stoughton, 1984
- Rosie, George, The Directory of International Terrorism, Edinburgh:Mainstream Publishing Co., 1986
- Rapoport, David C., Inside Terrorist Organisations, London: Frank Cass, 1988
- Salwen, Michael B. and Jung-Sook Lee, "News of Terrorism: A Comparison of the U.S. and South Korean Press", Terrorism: An International Journal, Vol. 11, 1988
- Sater, William, "The Terrorist Threat to Travelers", TVI Report, Vol. 6, No. 2, 1986
- Sato, Bunsei, Hijack, California: Gateway Publishers, 1975
- Sayigh, Yezid, "Struggle within, Struggle without: The Transformation of PLO Politics since 1982", International Affairs, 1989
- Sayle, Murray, "KE007: A Conspiracy of Circumstance", The New York Review, April 25, 1985

- Schmid, Alex P. and Albert J. Jongman, *Political Terrorism: A New Guide to Actors, Authors, Concepts, Data Bases, Theories, and Literature*, Amsterdam, SWIDOC, 1988
- Schoenberg, Harris O., *A Mandate For Terror: The United Nations and The PLO*, New York: Shapolsky Publishers, 1989
- Segaller, Stephen, *Invisible Armies: Terrorism into the 1990s*, London: Sphere Books, 1986
- Serge, D. V. and J. H. Adler, "The Ecology of Terrorism", *Survival*, Vol. 15, 1973
- Sherwin, Lawrence, "The KAL Incident: Analysis of a Soviet Propaganda Campaign", *Radio Liberty Research*, RL 371/ 83, October 4, 1983
- Shubber, Sami, *Jurisdiction over Crimes on Board Aircraft*, Hague: Martinus Nijhoff, 1973
- , "Aircraft Hijacking under the Hague Convention 1970 - New Regime", *I.C.L.Q.*, Vol. 22, 1970
- , "Is Hijacking of Aircraft Piracy in International Law?", *B.Y.I.L.*, 1968-1969
- Shultz, G. P., "Terrorism and Modern World", *U.S. Department of State Bulletin*, December, 1984
- Simon, Jeffrey D., "Misunderstanding Terrorism", *Foreign Policy*, Summer, 1987
- Shultz Jr., Richard H. and Stephen Sloan(ed), *Responding to the Terrorist Threat: Security and Crisis Management*, New York: Pergamon Policy Studies, 1980
- Slater, Robert O. and Michael Stohl(ed), *Current Perspectives on International Terrorism*, London: Macmillan Press, 1988
- Snow, Peter and David Phillips(ed), *Leila's Hijack War*, London: Panguin Books, 1970
- Sobel, Lester A., *Palestinian Impasse: Arab Guerrillas and International Terror*, New York: Facts on File, 1977
- Sochor, Eugene, *The Politics of International Aviation*, London: Macmillan Press, 1991

- St. John, Ronald Bruce, *Qaddafi's World Design: Libyan Foreign Policy, 1969-1987*, London: Saqi Books, 1987
- Starke, J. G., *Introduction to International Law (Tenth Edition)*, London: Butterworth & Co., 1989
- Stein, Leonard, *The Balfour Declaration*, London: Vallentine, Mitchell and Co., 1961
- Steinhoff, Patricia G., "Portrait of a Terrorist: An Interview with Kozo Okamoto", *Asian Survey*, Vol. 16, July-December, 1976
- Stering, Claire, *The Terror Network*, London: Weidenfeld and Nicolson, 1981
- Stohl, Michael, *The Politics of Terrorism*, New York: Marcel Dekker, 1979
- Strentz, Thomas, "Radical Right Terrorists vs. Radical Left Terrorists: Their Theory and Threat", *Flight Safety Digest*, April 1990
- Sundbuerg, Jacob W. F., "Lawful and Unlawful Seizure of Aircraft", *Terrorism: An International Journal*, Vol. 1, No. 3-4, 1978
- , "Legitimate Responses to Aerial Intruders: The View from a Neutral State", *Annals of Air and Space Law*, Vol. X, 1985
- Taheri, Amir, *Holy Terror: The Inside Story of Islamic Terrorism*, London: Sphere Books, 1987
- Tavin, Ely and Yonah Alexander, *Terrorists or Freedom Fighters*, Verginia: HERO Books, 1986
- Terrorism and Kim Il-Sung Regime (Korean), ROK Ministry of National Unification, Research Office, April, 1988
- Testrake, John, *Triumph Over Terror on Flight 847*, Sussex: Kingsway Publications, 1987
- Thackrah, John Richard, *Encyclopedia of Terrorism and Political Violence*, London: Routle and Kegan Paul, 1987
- , *Contemporary Policing: An Examination of Society in the 1980s*, London: Sphere Reference, 1985
- The Judgement of the Burmese Martyr Mausoleum Bombing Case, Seoul: The Institute for South-North Korea Studies, April, 1988

- "The Technology of Terrorism", Discover Special Report, June 1986
- Thompson, Leroy, The Rescuers: The World's Top Anti-Terrorist Units, Wiltshire, U.K.: David & Charles Publishers, 1986
- Thomson, David, Europe since Napoleon, Middlesex: Penguin Books, 1985
- Truby, J. David, How Terrorists Kill: The Complete Terrorist Arsenal, Colorado: Paladin Press, 1978
- Tucker, H. H., Combating the Terrorists: Democratic Responses to Political Violence, New York: Facts on File, 1988
- U.S. Congress, Office of Technology Assessment, Technology Against Terrorism: The Federal Effort, OTA-ISC-481, Washington, DC: U.S. GPO, July 1991
- U.S. Department of State, "Operation Desert Storm", March 4, 1991
- , Patterns of Global Terrorism: 1983-1990
- U.S. Department of Transportation, FAA, Worldwide Criminal Acts Involving Civil Aviation: 1974-1975
- , Significant Worldwide Criminal Acts Involving Civil Aviation: 1976-1978
- , Worldwide Significant Criminal Acts Involving Civil Aviation: 1979-1985
- , Criminal Acts Against Civil Aviation: 1986-1990
- , Aircraft Hijacking and Other Criminal Acts Against Civil Aviation, Statistical and Narrative Reports: Updated to January 1, 1986
- , Semiannual Report to Congress on the Effectiveness of the Civil Aviation Security Program: 1984-1987
- USIS, "U.N. Urges Libya to Cooperate in Bombing Inquiries", January 22, 1992
- Vatikiotis, P. J., Arab Regional Politics in the Middle East, London: Croom Helm, 1984
- Walker, Clive, The Prevention of Terrorism in British Law, Manchester: Manchester University Press, 1986

- Wardlaw, Grant, *Political Terrorism: Theory, Tactics and Counter-Measures*, Cambridge: Cambridge University Press, 1989
- Warner, Philip, *Firepower: From Slings to Star Wars*, London: Grafton Books, 1988
- Weinberg, Leonard B. and Paul B. Davis, *Introduction to Political Terrorism*, New York: McGraw-Hill Publishing Co., 1989
- Westlake, Michael, "On course for disaster", *Far Eastern Economic Review*, October 13, 1983
- Wilkinson, Paul, *Terrorism and the Liberal States*, London: Macmillan Press, 1986
- , *Political Terrorism*, London: Macmillan Press, 1974
- (ed), *British Perspectives on Terrorism*, London: George Allen and Unwin Publishers, 1981
- , "Aviation Terrorism and the Changing Threat", *International Aerospace Review*, 1989
- , "The Lessons of Lockerbie", *Conflict Studies(RISCT)*, No. 226, December, 1989
- , "Terrorist Targets and Tactics: New Risks to World Order", *Conflict Studies(RISCT)*, No. 236, December, 1990
- , "Vital Steps to Air Safety", *Plane Facts(News from the I.F.A.P.A.)* January, 1989
- , "Terrorism: International Dimensions: Answering the Challenge", *Conflict Studies*, No. 113, November, 1979
- , "Can a State be Terrorist?", *International Affairs*, Vol. 57, 1981
- Wolf, John B., "Controlling Political Terrorism In A Free Society", *ORBIS*, Vol. 19, No. 3-4, 1975
- Wright, Quincy, "Legal Aspects of the U-2 Incident", *American Journal of International Law*, Vol. 54, 1960
- Yodfat Aryeh and Yuval Arnon-Ohanna, *PLO: Strategy and Tactics*, New York: St. Martin's Press, 1981

Ziegler, David W., War, Peace, and International Politics, Boston: Little, Brown and Company, 1987

Ziring, Lawrence, The Middle East Political Dictionary, California: ABC-Clio Information Services, 1984

Subsidiary Sources

Daily and Weekly Newspapers and News Journals

Arab News

Bangkok Post

Current Digest of the Soviet Press

Facts on File

Keesing's Contemporary Archives

Life

Newsweek

Time

The Boston Globe(Reprint)

The Cho Sun Il Bo(Korean)

The Daily Mail

The Daily Record

The Daily Star

The Daily Telegraph

The Dong-A Il Bo(Korean)

The Economist

The Financial Times
The Gazette(Reprint)
The Glasgow Herald
The Guardian
The Independent
The International Herald Tribune
The Jerusalem Post
The Korea Herald
The Korea Times
The Los Angeles
The Nation(Reprint)
The New York Times
The Observer
The Scotsman
The Sunday Telegraph
The Sunday Times
The Times
The U.S. & World Report
The Wall Street Journal
The Washington Post(Reprint)
USA Today
Wall Kan Cho Sun(Korean)

Conference Papers and Lectures

Jin-Tai Choi, "Consideration for Global Aviation Security: Airports in the Third World", Research Paper for Seminar at University of St. Andrews, May 7, 1992

Wilkinson, Paul, "Putting Lives First?: the problems of creating an effective international regime for aviation security", Inaugural Lecture, October 22, 1991, University of St. Andrews

Wallis, Rodney, "Aviation Security", Paper for Discussion at University of St. Andrews, October 10, 1991

-----, "Baggage Security", FAA's Fifth International Civil Aviation Security Conference, October 24-27, 1988, Washington, D.C.